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Journal *of* Research *in* Music Education

A Publication of the

MUSIC EDUCATORS NATIONAL CONFERENCE

Volume IX FALL 1961 *Number 2*

MUSIC EDUCATORS NATIONAL CONFERENCE

A DEPARTMENT OF

THE NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

NEA Center

1201 Sixteenth St., N.W., Washington 6, D.C.

Journal *of* Research *in* Music Education

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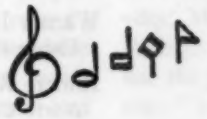

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Cost: Single copies of each number are $2.00 except for the second numbers of Vols. V and VI, and the first number of Vol. VII, all of which are $3.00 each. The annual subscription price per volume is $3.75. Members of the Music Educators National Conference may subscribe for $2.00 per volume by adding this amount to the amount of active dues when dues are paid. Each volume comprises two numbers. Copies of most back numbers are available.

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Soviet Music Instruction: Service to the State

STANLEY D. KREBS

ACKNOWLEDGEMENT of certain achievement in education was one of the earliest grudging tips of the hat by the West to the young Soviet Union. Of course, we reserved certain doubts. There was no reason originally, nor is there now, not to exercise the proper critical faculties, but more recent events have caused Western observers to look in frank admiration at Soviet educational programs which have had a scientific and technical yield apparently equal to our own. The question naturally arises, what, then, of the other disciplines: philosophy, literature, art, and music? In our hasty, self-conscious reappraisal of our own educational balance of disciplines there is a tendency to bolster the sciences and technology at the (literal) expense of the apparently less fruitful area of the arts. The feeling seems to be that thus it is in the Soviet Union. Undeniably, some elements of the Soviet economy suffer by comparison with ours in order to post a brilliant array of technological achievements, but, just as certainly, the suffering elements, measured in terms of money and materials, are not the arts.

To think so is to misunderstand the Soviet system, its ends and its means. Planning centrally, the Soviet state predicts what it will need to perpetuate itself in terms of farm and factory production, technicians, scientists, soldiers, and artists. Effective measures are employed to insure fulfillment of the plans. Crops and factories may not always come up to expectations, but after painful trial and error, the educational system has performed well in recent years. The usefulness of the artist in the domestic and international building of communism has never been ignored, and the supply of painters, writers, performers, and composers has never been neglected under the Bolsheviks. Materially, no means is ignored. Perhaps only of Russia today could one use the phraseology "production of artists," but, as we shall see, some of the techniques used to insure the supply of artists have been successfully applied to oversupply the demand for basic scientists and engineers. Clearly, there is no possibility of such a demanding system in a country, like the United States, which puts some value on freedom of personal choice. But we can learn, by an analysis of that system, the inner workings of the powerful cultural front (to use communist terminology) the Soviets present to the world. Accordingly, we will consider first the background and outline of the present system, second the administration and financial operation, and third the curriculums and qualitative factors.

I

The General Ideological and Historical Background

One must not be misled into thinking that the events of October 1917 brought about an abrupt change from tsarist to communist political philosophy and practice. Liberal, revolutionary thought had been growing in Russia since well before the first performance of Glinka's *Life for the Tsar* in

1836. Throughout the 19th century, education, including music education was chiefly for the upper classes. By 1866 the Rubinsteins had founded conservatories in St. Petersburg[1] and Moscow. A stable teaching tradition arose in these schools during the so-called "Golden Age" of Russian culture. During the ensuing "Silver Age" (the late 19th and early 20th centuries), three more cities in the Ukraine (Odessa, Kharkov, Kiev), built conservatories, although they offered terminal music education only at a later date. General education was, by 1914, becoming increasingly widespread. The liberal and revolutionary activity of the intelligentsia, from the Populist movements of the late 1800's through the 1905 revolution and up to the first world war, did much to pull the people part way out of centuries-old illiteracy. In addition to the state-controlled system, serving some seven percent of the population,[2] individual incentive had created localised systems of instruction so that around 40 percent of school age children were getting some sort of training. The organization of such localised systems for instruction in the arts can be credited partly to the Union of Art Workers, one of the many such "unions" which sprang up in the days of the 1905 revolution. Other revolutionary-minded musicians offered their wares to the people in short-lived "anti-conservatory" schools of popular music. Very little is known of these schools, nor remembered in Soviet Russia today. They were organized in the "proletarian" cities of Moscow and (especially) Petrograd, and were doubtless victims of the very revolutionary zeal that had created them. Elsewhere the private teacher thrived, and by 1914 he was as often as not, Russian instead of German.

The first World War proved to be the end of this phase of the "Silver Age" in Russian culture. Its chief characteristic had been the pervasion of the muses through the classes. To be sure, remnants of this Silver Age persisted through representation in exile, but the coffin was borne out of the immediate Russian scene by such bearers as Ippolitov-Ivanov, Gliere, Miaskovsky, Glazunov, Gretchaninov, Rachmaninov, Prokofiev and Stravinsky. The subsequent destinies of these men (two to immediate exile, two to subsequent exile, one to exile and return, and three who stayed) shows the tracery of paths followed by Russian music after the Red October. On the eve of the Bolshevik coup, Tchaikovsky had been dead over two decades, Rimsky-Korsakov about ten years. Scriabin had died two years earlier. The traditions at the Petrograd and Moscow conservatories had continued under such men as the younger Rimsky-Korsakov, Liadov, Leshetitsky, Kastalsky, Glazunov, Taneyev and others.

Militant Marxism had concerned itself with education long before 1917. Education, so the theory ran, had been a weapon of the bourgeoisie to subjugate the masses, and now that weapon must be delivered into the hands of the communist revolutionaries. Within a year of the October events (November 7, 1917, New Style) all the existing music schools had been transferred to state ownership. Music publishing and concert and theater activity were also

[1]The onetime capital city was called St. Petersburg until 1914, Petrograd until 1924, then Leningrad.

[2]Division of International Education, International Education Relations Branch, Bulletin 1957, No. 14, *Education in the USSR* (Washington, D.C.: Department of Health, Education, and Welfare, 1957).

decreed to belong to the state.[3] For the present, active creative artists were left alone. It had been the express wish of the membership of the Union of Art Workers that creative art be left free even of Bolshevik politics. They chose to find their own means for creating a revolutionary art. In spite of a few aesthetic pronouncements, artists, as a group, were left alone; the party was otherwise engaged, and the theory persisted, as Marx had predicted, that creative gifts would eventually be more generally distributed anyhow under the optimum environment of communism. But the schools, including the conservatories, went under state control. A. V. Lunacharsky was appointed People's Commissar of Education. He was a sensitive but mild person, willing worshipfully to follow Lenin's headlong rush even though he trampled over his own notions of beauty to do so. For the moment, all social classes but the proletariat were disenfranchised. Schools, including music schools, were far too few to accommodate everyone who wanted (or who was supposed to want) to go. The proletariat must have first chance. This "solution" had two ideas behind it. The proletariat, as the strength-source of the communist stage of history, was most deserving of the rewards of the new order. Secondly, in a new regime, by no means firmly established, the proletariat represented a historically "safe" class to educate. To the conservatories this meant that the primary entrance requirement was evidence of proletarian origin. The established staff at the conservatories viewed the inevitable disaster with alarm, but held their tongues. Their position was precarious. Hadn't they, as a class, recently emerged from service to the bourgeoisie? A system of double standards arose to accommodate the broad range of student ability, strong traces of which remain today. The confusion was compounded when the proletarian students began feeling their oats, questioned and overturned the traditional teacher-student relationship. At one point in the first fifteen years, a part of the growing *komsomol* (Young Leninist Communist League) took over entrance and administration functions and even those of curriculums and testing at the Moscow Conservatory. The chaos there seems to have ranged from the macabre to the hilarious.[4] It is important to remember that this and similar situations were not the result of direct central party or state policy, but, rather, the product of the party's *laissez faire* attitude.[5] Other areas of education were suffering similarly, and, worst

[3] *Istoriia russkoi sovetskoi muzyki* (History of Russian Soviet Music) Vol. I (Moscow: Muzgiz, 1956), p. 20.

[4] Some of the details of this period in the history of the Moscow Conservatory are related in Juri Jelagin's *The Taming of the Arts*.

[5] The most powerful influence on education, especially higher education, was not that of Lunacharsky, but of Professor M. N. Pokrovsky, a historian and Lunacharsky's assistant in the People's Commissariat of Education. Pokrovsky founded the Institute of Red Professors. The Institute, mostly historians, was slavishly determinist in interpreting the past and expedient when regarding the present. As the vanguard of proletarian education they assumed control, with tacit state sanction, of most of the educational institutions in the large cities, especially Moscow. The Moscow Conservatory had a number of musicologist "Red Professors" and at their head stood no less a figure than the composer, Alexander Kastalsky. The Institute sought to clear the professorial ranks of bourgeois representatives and (by 1929) to warp all education into the posture of direct support of the first five-year plan. Present day Soviet scholars and scholarship ignore or condemn Pokrovsky and the Red Professors by name, yet the influence was strong and many features of the Institute policy survive today. Pokrovsky himself was not officially denounced until 1936, four years after his death, although a general reversal of his policies had taken place earlier.

of all to the state, little was being produced. At best, academic standards had been drastically lowered, although the extreme mentioned at the Moscow Conservatory was rarely attained. An inevitable general education reform began in 1930.[6] Lunacharsky had been regarding the artists and composers critically since 1929, but now, in the early 30's, serious measures were taken in both education and the arts. Competitive examinations, demanding far more intermediate training and preparation, were introduced as entrance requirements to higher educational institutions. The respect for the teacher was re-established, and the Young Communist League role was altered sharply as was the internal structure of that organization. In the arts, in 1932, the various associations, circles, unions, and clubs, each representing a faction of "revolutionary" creative thought were abolished. A single organization, contained within the state and party mechanism, was created for composers (and musicologists), the Union of Soviet Composers. The new educational and artistic apparatuses were pervaded at every level, ideologically by Marxist-Leninist (and increasingly Stalinist) thought, and physically in the person of directors or assistant directors for political activity and training. It was implied that the reason for the pre-1932 confusion was that the party had not been present at the levels where its direction was needed most. The party steered the people unerringly to and through the revolution and civil war and its leadership was still necessary in the important cultural phases of communist life. In point of fact, however, the party assumed its monolithic front only in the early thirties.

[6] *Education in the USSR*, p. 53.

By 1934 the over-all system that exists today was basically established and was now characterized by state-party control. The first 17 years had been ones of trial and error. Aims had been clear enough, but means had yet to be tested. Even in the chaos, tangible gains had been made; there were by then 11 conservatories, more than double the prerevolutionary number. The growth to the present has been just as impressive.

The Present System In Outline

Curiously enough, the Soviet system, like that in the United States, has the surface aspect of a semi-amateur "liberal arts" program of huge size which supports a narrowly specialized program of truly professional training. The chief difference is that whereas in the United States a university school of music may serve both, in the Soviet Union, as we shall see, the two programs are housed separately.

There are now 23 conservatories (including the Gnessin Institute and the Institute of Military Band Directors, both in Moscow and both conducting training on the conservatory level) in the Soviet Union. Soviet higher education institutions are known by the Russian initials *VUZ (Vysshee Uchebnoe Zavedenie)*. The conservatory is a *VUZ* as are universities (about 35 in the Soviet Union), academies, and institutes. They present a five-year course of undergraduate training, a three-year graduate course which may or may not lead to the degree of *Kandidat*,[7] and special arrangements are made at the Leningrad

[7] The degree *kandidat* is roughly equivalent to the U.S. "candidate for degree," i.e., course work completed, orals passed, dissertation and its defense yet to go toward the Ph.D.

and Moscow Conservatories for work towards a *Doktor Nauk* (Science) or *Doktor Iskusstvovedeniia* (Arts)[8] degree. The school system culminating in the conservatory is, in outline, the same as that supporting the other *VUZ*'s, and the general trend upwards through the system is one of constantly narrowing specialization. Immediately under the conservatories are the music *uchilishches* (*uchit'*—to study) which are most like our high schools. The *uchilishche* level in music is the one differing most from the corresponding level in other disciplines. In such a tightly fitted general system, the *uchilishche* takes up the slack and absorbs the miscarriages and overflow from the other levels of the music system. It may, depending on the individual school, present either terminal or preparatory education (the *uchilishche* level in other disciplines is, as a rule, terminal) and may accommodate students arriving from various grade-levels in other schools. Also feeding directly into the conservatories are the special eleven-year schools of music (ages seven to eighteen). These are equivalent to the ten-year school (*desatiletka*) of the regular system with an extra year added to accommodate the increased time required for musical activities, practice, etc. These schools are frequently if not always connected with a conservatory, occasionally using that establishment's physical plant (or part of it) and even sharing faculty members. Others are a result of educational policy of the early '50's, temporarily abandoned, which sought to make ten instead of seven years of schooling compulsory for all. Accordingly, some *uchilishches* and seven-year schools (*semiletki*) were combined (many had, in fact, been co-located), and have remained that way. The music seven-year school (ages seven to fourteen) duplicates the first seven years of the eleven-year and such schools are widely distributed. In 1958 there were over 1200 such schools in the USSR,[9] and the number continues to grow.[10] Additional music four-year schools, once numerous, now rarely exist independently. They are vestigal remains from the time when schooling was compulsory for only four years. Nevertheless, diploma "break-off" points still exist at fourth, as well as seventh and tenth grade levels.

In this rough outline, one can see that the special musical institutions are counterparts of institutions for regular education. Either regular or special instruction can lead to the conservatory, with the *uchilishches* functioning variously. But in addition to the professional apparatus outlined, there is an extremely important, huge program of centrally organized "amateur" and semi-amateur activity under the Ministry of Culture, trade unions, and some other groups including police groups. This *samodeatel'nost'* (literally "auto-activity") has many functions, as we shall see, and is regarded officially and for budgetary purposes as "educational" activity. By far the

[8] *Doktor Nauk* (or *Iskusstvovedeniia*)—a highly specialized, semi-honorary degree granted only after considerable time and accomplishment in the field. There is no exact equivalent in the American academic system, although one might say that promotion to the rank of professor in a large U.S. university, with the accomplishment and prestige implied, is very like the granting of the *Doktor* in Russia. The degree, as a matter of fact, is usually prerequisite to granting of professorial rank. It is equivalent to the British Doctor of Letters.

[9] *Entsiklopedicheskii muzykal'nyi slovar'* (Moscow: Bol'shaia Sovetskaia Entsiklopediia, 1959).

[10] A recent (January 1961) article in the periodical *Sovetskaia Kul'tura* states that the number of such schools in Georgia alone rose from 70 to 83 in 1960. Georgia's population is about four million.

largest of the divisions of *samodeatel'nost'* is that of music and the majority of the full-time teaching staff is comprised of musicians. Also within *samodeatel'nost'*, the private teacher reemerges in new robing.

II

Administration, Finance, and Facilities— General Structure

Most higher education in the Soviet Union is under the Ministry of Education. Primary and secondary education is handled by ministries of education in the various constituent republics, but the financial and general administrative (standardizing) planning is done centrally. Schools of art, ballet, and music, however, function nominally under the All-Union Ministry of Culture, with its subordinate republican ministries of culture. The Ministry of Culture standardizes curricula and handles graduates and the flow of students, but the Ministry of Education includes the financing in its budget and sets general entrance and graduation requirements for music schools and negotiates for schools of Fine Arts. The implied confusion does exist, but the two ministries work closely together and, in practice, the existing rules are broadly interpreted. Both operate with and under the State Planning Commission which plans and prepares the budget for all phases of the economy. The objectives of the planning are decided and issued as directives by the higher Communist Party elements, in keeping with its traditional role of directing the destiny of the state. The directives are poured into the governmental apparatus and filter through, supervised at every level by a corresponding party organ.[11] The financing is handled not only to supply but to insure the supply of artists considered necessary to serve the interests of the state as predicted by the party. It is geared budgetwise to maintain a broad base of supply for the conservatories. The resulting pyramidal structure is broad-based indeed. There are 23 conservatories, about 150 *uchilishches* and 11-year schools, more than 1200 7-year schools and thousands of state supported and controlled *samodeatel'nost'* units. Obviously there is a great waste of "individuals" at the successive cut-off levels, but the state sustains whatever financial loss there may be and even underwrites an insurance "reserve" of talent to keep the conservatory enrollment at the proper figure. The system contains an inherent qualitative problem which we will meet later.

Conservatory Financing and Administration

The conservatory is geared for the professional. All students in conservatories receive scholarships (stipends). The amount varies from conservatory to conservatory and from specialty to specialty. For instance, a piano student in the second year at the Moscow Conservatory gets about 25 to 30 rubles a month.[12] His exact counterpart in Saratov will receive about 15 to 18 rubles. The difference is explained by the higher cost of living in Moscow and by the fact that the Saratov Conservatory (with most others) is frankly

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[11] *Ustav kommunisticheskoipartii Sovetskogo Soiuza* (Statutes of the communist party of the Soviet Union) (Moscow: Gospolitizdat, 1960).

[12] Quotations are in the "new" ruble. A currency reform in January 1961 theoretically equated the new ruble to the dollar. The old ruble was the theoretical equivalent of $.10.

minor league compared to the Moscow Conservatory.[13] The average stipend is not sufficient for the necessities. Students seek part-time work. The conservatory itself steers some students to extra-curricular sources of money, but the general official attitude is that of ignorance of such activities since the façade is maintained that the stipend suffices. Students may legally play in some performing group (theater or café orchestra), work in libraries or museums, or even earn a bit during the summer on a collective farm. Less legally, but acceptably among his peers, the student may deal on the fringes of the black market in clothing (girls sometimes sew for commercial sale) or "bootleg" art (among the "underground" modernist painters recently publicized in the West are a number of musicians) or jazz. None of these activities are so filled with intrigue or rebellion against the state as the excited visitor often feels, but are, rather, commonplaces in that gray area where one is apt to find any Soviet citizen occasionally. Parents help financially and are glad to do so when they can. Having a son or daughter in a *VUZ* is a source of great pride, achievement in education being the single means of social and financial advancement for many. The minimum for individual subsistence of the student may safely be calculated at 45 to 50 new rubles a month.

Stipends are theoretically geared to a student's academic performance, but in practice all get about the same. Sympathetic teachers grade to assure at least an average stipend (one could grade so as to stop the stipend altogether), and bad grades are usually given only when the student is to be discouraged from continuing. Stipends may be temporarily suspended as a disciplinary measure or for bad grades in the student's specialty (piano, composition) or in the Marxism-Leninism series required of all. Other grades have little or no effect. At the Leningrad and especially at the Moscow Conservatory, special stipends are reserved for students from the most distant, backward republics and for foreign students. Financial arrangements are made exceedingly appealing for both Eastern *and* Western prospects. A graduate student-pianist from Sofia, for instance, receives a whopping 90 rubles a month.[14] An undergraduate Bulgarian girl harpist receives 72 rubles. French, German, Japanese, Cuban, and other foreign students receive similar stipends. The highest, 150 rubles a month, go to American, British, and some Scandinavian students. Extra money is available to the regular student in the form of fattened prize stipends and an occasional commission to a student composer. The Rimsky-Korsakov stipend at the Moscow Conservatory provides a fifth year student with 48 rubles a month. The Stalin stipend, awardable in any specialty, is worth a relatively comfortable 80 rubles a month.[15] Commissions for

[13]Of the twenty-two conservatories and the Military Directors' School in Moscow, nine are in the RSFSR or Great Russia proper (Moscow-3, Leningrad, Gorky, Kazan, Novosibirsk, Saratov, Sverdlovsk), four in the Ukraine (Kiev, Kharkov, Odessa, Lvov) and one each in Kazakhstan (Alma Ata), Azerbaidzhan (Baku), Belorussia (Minsk), Lithuania (Vilno), Latvia (Riga), Armenia (Erevan), Moldavia (Kishinev), Estonia (Tallin), Uzbekistan (Tashkent) and Georgia (Tbilisi).

[14]Any surplus must be spent. Only under prohibitive conditions can rubles be exchanged or even taken out of the USSR.

[15]Although the dollar-ruble ratio is set by the Soviet government at one to one, this rate is arbitrary. It is difficult to equate ruble figures

composers may go as high as 100 rubles.

Dormitory space is provided at the token rate of 1.5 rubles a month. Recent conservatory building has combined dormitory and school plant. Elsewhere, existing buildings near the school are acquired and remodeled as is the case at the Moscow Conservatory. One of the two Moscow Conservatory dormitories is nearly a mile from the school itself. The other, about a block away, is a mixed apartment dwelling, half students and half regular citizens.

In the biggest conservatories funds are provided the opera, composition, and conducting departments for hiring orchestras of good quality for student use, although the frequency of availability is by no means as great as often reported. At Moscow the "available" orchestra is actually the opera orchestra which is composed largely of paid students, and which only occasionally has time for the student composer or conductor. In Leningrad, the members of the Philharmonic are used for school opera studio productions. Since the opera studios function only to train operatic soloists, choruses are also hired, usually from among the students. An important subdivision of the conservatory is formed by the staff accompanists, a pool of part-time pianists available for assignment by the professor. They are on an hourly wage. Musicology and composition students are paid the regular stipend for time away from Moscow on "field" trips which are a part of the regular curricula. Opera groups may be paid for short tours. All this is financed through the school by the Ministry of Culture, or sometimes by the Union of Composers. The Union of Soviet Composers reaches in other ways into the conservatories to aid their future members. A resort and rest home is maintained by the Moscow chapter in Ivanovo to allow young composers, including those at Moscow and some of the other conservatories, to work in the quiet of country surroundings. The "resort" is significantly located adjacent to a collective farm where the young artists are encouraged to observe and even take part in the production of other commodities to meet state needs and where they can "enjoy the creatively nourishing contact with the workers and the soil."

The teaching staffs of the conservatories are large and impressive. The ratio of teaching personnel to students is as favorable as one to three at the Leningrad and Moscow conservatories. Salary figures are generally not available, but the known salaries indicate that the spread is extremely wide. There are three basic academic ranks, professor, docent, and instructor, and the semi-academic assistant. These correspond with the ranks in the other *VUZ* universities and institutes. There are also certain student assistant positions, also coinciding with positions at the other higher institutions. Peculiar to the conservatories, however, are arrangements with specialists such as instrumentalist members of the local symphonies. In the three larger conservatories, each instrument is represented by at least one full-time teacher (and many more, of course, for piano,

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to American dollars. For purposes of comparison, here are some wages of Moscow workers: *Inturist* guide (first three years), 75 rubles a month; waiter in a restaurant, 35 to 50 rubles; skilled factory worker, 110 rubles. Some Moscow prices: man's shirt, 12 to 23 rubles; can of milk, .27 rubles; simple hotplate, 3 rubles; good cognac, 9 rubles. In general, prices are so fixed that the bare necessities are quite cheap, the luxuries prohibitively expensive.

violin, cello, etc.) but in the smaller ones, such instruction as that in trumpet, clarinet, double bass, or percussion may be handled exclusively by the part-time arrangements mentioned. The professorial rank is highly paid. It is a lofty academic rank indeed, requiring usually the Doctor of Science or Arts degree, and the highest salaries at the Moscow Conservatory (over 10,000 rubles a year) compare with those at Moscow State University. Certain high positions at the Moscow Conservatory are difficult to define academically. Some individuals, composers and performers, seem to be in a uniquely unlimited income category, but teach either by choice or by personal inclination to repay the state for the benefits of the communist environment. Thus, average salaries are difficult to calculate. But from this high category one ranges downward to the wage of instructor (*prepodavatel'*). The average seems to be 80 to 110 rubles a month, not much different from the average Moscow wage. The student assistants are paid in amounts which suggest fattened stipends. The active staff is further increased by "special assistants" whose duties are defined by law as research. They, too, are a feature of other higher institutions, but as may be expected in a conservatory, their function has been adapted to meet special needs. They are usually graduates who have not been encouraged to get into graduate work. Rather than enter the work designated on their diploma (see below) they have chosen (subject to faculty approval) to remain in an underling position at the conservatory. They may not teach, but are assigned to various professors as readers, messengers, and, it would seem, general lackeys. The law also defines the teacher's duties in higher institutions as pedagogy *and* research. He is required to spend two to three hours a day on research.[16] This obligation is taken quite literally by conservatory staff members, although the law was passed with institutions in mind where research and laboratory work is more directly applicable. The conservatory teaching load is light by Soviet standards; a composition teacher, for example, teaches a maximum of two days a week, at least in theory. His research obligation is met by writing articles on history and methods and the rest of his time is for his own creative activity. It can be seen immediately that the required "research" time has a rather special character in a conservatory, but the teacher takes the obligation seriously, at the same time admitting that at times it has no purpose other than to fill ones desk with unread manuscripts. Teachers enjoy paid vacations during the summer, and, although there are no sabbaticals by name, they are encouraged (composers and musicologists are virtually required) to take "research leave" for extended periods of time. Soviet educational philosophy demands much research of the teacher in order to keep up with developments in the field. To assure further that the teacher has not lost control of his subject, academic positions are reopened to competition every three to five years. At this time the holder of a position competes with any aspirants to the position on the basis of accomplishment in his specialty, teaching ability and yield, and on the basis of the contents of the applicant's dossier. The latter affords the heavily weighted information on character, citizenship and

[16] From interviews with members of the staff of the Leningrad Conservatory. See also *Education in the USSR*, p. 196.

socio-political contribution, party and union membership, etc. The process is not as rigid and heartless as it may seem. Arrangements for actual replacement are made in advance by means of "invitations to compete" and by informing the person to be replaced that he should look around for another position.

Uchilishche Financing and Administration

In the general educational scheme of the Soviet Union, the semiprofessional (*uchilishche-tekhnikum*) training level was organized to provide the much-needed support services to the professional fields. As has been mentioned, and as we shall see in detail, the musical *uchilishche* assumes this and many other functions. Like the conservatory, the *uchilishche* functions under the All-Union and Republican ministries of culture. They are also subject to matriculation, curriculum and graduate standardization by the Chief Directorate of Semiprofessional Training, a branch of the Ministry of Higher Education. These schools are widespread, numbering 130 in 1958.[17] Of the 24 specialties listed among the more than 3,250 *uchilishche*-level institutions only eight specialties were represented by more than 130 schools in 1956.[18] The musical *uchilishches* are widely distributed in the union republics and autonomous republics. The general financing is the same as that in a conservatory. As in the conservatory, all students receive stipends, though they are little more than token payments (starting at about four to five rubles a month). Again, stipends are usually stopped only when the student is to be dropped from school. The stipend situation in *uchilishche*-level training is a relatively new one. In most cases, before 1955, the student even paid a small tuition fee, but this was apparently not the case in at least the better musical *uchilishches*. Students, depending on the location of the *uchilishche*, have access to professional musical organizations, although it is far more limited than in the conservatory. A tradition of this semiprofessional level schooling is that of on-the-job training. This varies with the function of the particular musical *uchilishche*. Those specializing in choir conducting will work with farm or factory *samedeatel'nost' groups*. Instrumentalists also have opportunity to work with the less numerous amateur orchestral groups. Practice teaching arrangements are made for embryo teachers in local, regular 10- and 7-year schools. The student who, in spite of the wide geographical distribution of the *uchilishches*, finds it necessary to live away from home is accommodated in dormitory space of another nearby institution or with a local family if the *uchilishche* has no dormitory space. The teaching staff of an *uchilishche* consists, as a rule, of conservatory graduates or accomplished workers in the field. Much part-time teaching is used and staff turnover is reported high. In some *uchilishches* in or near large cities, a staff rotation system is worked out so that a 'cellist may teach one year, play in orchestras for two or three years, and then return to teach. Conservatory teachers often take on an extra assignment at an *uchilishche*, for which they are well paid. The obligation of the *uchilishche* teacher is the

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[17] *Entsiklopedicheskii muzykal'nyi slovar'*, p. 168.

[18] *Spravochnik dlia postupaiushchikh v srednie uchebne zavedenii SSSR* (Guidebook for those entering intermediate education establishments in the USSR), Moscow: Sovetskii Nauk, 1956).

same as that of a conservatory teacher. His "research" is expected to have a more local source and more immediate application. Salaries probably vary as widely as do the purposes of the different *uchilishches*.

Eleven- and Seven-Year Schools

Almost invariably, 11-year schools of music are connected with either a conservatory or (rarely) *uchilishche*. Quite often an 11-year school is a combination of a 7-year and the four years of an *uchilishche*. Seven-year schools of music still exist independently in great numbers. Again they function under the ministries of culture. Students may receive stipends in the 11-year schools, but do not receive stipends in the 7-year schools except under unusual circumstances. In spite of advertisement to the contrary, including that propagated by unobservant tourists, there is a tuition charge in these schools, as is attested to by signs in the halls: "Parents! Have you paid your child's tuition for the month of January??!!" Teachers are mostly conservatory graduates, but who have had additional pedagogical training. The bulk of practice teaching supervised by conservatories is carried on in 7-year schools, apparently simply because there are so many more of them. Interestingly, the prelude to state recognition and support of this type of school (and the four-year school) is often a voluntarily built, locally financed institution. Upon such demonstration of "need and will" on the part of the people, the appropriate ministry steps in with the funds. The same process is often gone through in order to get a local kindergarten.[19]

[19]*Education in the USSR*, p. 40.

Samodeatel'nost' Administration and Financing

Samodeatel'nost'[20] appears under various ministries. The Ministry of Culture, however, directs most of it and handles programming except the financing for those units not in the ministry's network. The basic *samodeatel'nost'* unit of administration is the village, farm, factory, or other collective house (or palace) of culture. A word of explanation may help concerning the state and party thinking behind these collectives. That a *kolkhoz* (collective farm) or factory brings a large group of people together is obvious. Less clear and less well understood is the "collective" social nature encouraged in any intra-economic grouping. The philosophy would be tedious here; examples will serve to illustrate: A Moscow hotel staff, from director to janitor, organizes a "collective" which assumes certain state-required social, political, and cultural functions. They maintain an out-of-town rest and vacation spot, they take vacations together, they organize circles for socio-political discussion and cultural participation. They may have a collective ensemble of chorus, instrumentalists, and dancers. Government workers in the telephone exchange have a chorus and small folk orchestra. Village dwellers from a variety of economic positions form a collective village chorus. Students in one of the disciplines at the University of Moscow, in their *komsomol* organized collective, might have a folk instrument ensemble. Even cultural organizations, such as theater staffs and art unions have their *samodeatel'nost'*. Students

[20]Literally "personal activity" or "auto activity," more idiomatically, "doing it yourself." The word has assumed most of the meaning of the Russian *liubitel'* (amateur).

at a conservatory may even have a collective body which is organized into farming brigades, just to vary the fare.

The Soviet constitution places certain restrictions on the right to assemble. This law, however, was never intended to restrict the Russian tradition of the cultural "circle." The state's concern is that such circles do not become political. On the levels mentioned above, the activity is usually not directed full-time, but any such groups are required by law to declare their existence and aims, and, in turn, the state and party, through the appropriate ministry, supply materials and direction. In practice, an interested group consults lists of approved *samodeatel'nost'* activities, chooses one, and takes advantage of state provided plans of organization and operation. Centrally organized *samodeatel'nost'* enters at the next level of activity. This centers around the house (or palace) of culture whose facilities are used by more than one collective. Large *kolkhoz* and factory collectives often have their own. Here membership is redistributed in circles concerned with dramatics, art, choreography, agriculture, and music. Music occupies the time of the largest single number of circles: 96,000 music circles out of a total of 300,000.[21]. Since the music circles are large, there is an even higher percentage of individual participation. The above figures do not include the *kolkhoz* clubs (about 25 percent of the total number) where the percentage of musical participation is far greater. As these figures suggest, the activity is enormous. As the program has grown, the musical sections have either dominated or become self-sustaining and independent of the minor circles. The trend has been toward more instruction and recent efforts have been made to increase the quantity and quality of the teaching staff. In the period from 1951 to 1956, the paid, full-time staff of the Ministry of Culture network increased 12 percent, of the labor union network 50 percent and of the *kolkhoz* network, (during a formative period) 400 percent.[22] The best *samodeatel'nost'* positions are considered premium assignments by conservatory graduates, although figures are not available on salaries. Full-time instruction (147,068 positions in 1956) is augmented by part-time participation of practicing musicians and teachers in formal music schools. This number includes many of the most famous and successful musicians in the Soviet Union, who are encouraged by party and state to feel that they are fulfilling a cultural obligation to the people. Participation in such "social work" (*obshchestvennaia rabota*), is, moreover, expected to be reflected in one's dossier.

Facilities, Building

In the Soviet Union construction and building is one of the most serious of state problems. Conflicting ministries and subministries, all concerned with some aspect of the building trades, generate mounds of red tape which are the despair of the State Planning Commissions. For non-critical (i.e., non-military) building the problem is further complicated by the siphoning off of building materials and workers into factory and military construction. Working and living space is at a premium throughout Russia, and especially in the large cities. In the face of this huge space and construction problem, the attention paid by the state to the physical plant of Soviet music educa-

[21] All-Union Ministry of Culture, *Kul'turnoe stroitel'stvo SSSR* (Cultural structure of the USSR) (Moscow: 1957), p. 285.

[22] *Kul'turnoe stroitel'stvo*, p. 276.

tion reveals the importance of music training in Soviet thinking. From five prerevolutionary conservatories, the number has grown to 23. Five of these have been built since the war, the last one in 1956 in Novosibirsk. The number of *uchilishches* has also increased lately (by about 13 percent, 1948 to 1958) and so has the number of 7-year music schools, although figures on how much of the increase represents new building are not available. The number of participants in the formal music program has not increased sharply, in keeping with state needs, but more and better facilities are constantly being placed at their disposal. Although the number of public theaters decreased slightly from 1950 to 1955 (545 to 508), this drop was far more than offset by the growth of club houses and Houses and Palaces of Culture. From 1951 to 1956 there was an increase of 3,803 units, and most of these included auditoriums of size enough to present, at the least, small operas. To the Ministry of Culture network must be added the smaller networks of the collective farms and the labor unions. The total number of amateur participants in the "clubs" and "palaces" as of January 1, 1956 is reported as 4,799,400. The total number of students in *all* institutions of higher education, for purposes of comparison, in the school year 1955-1956, was 1,867,000. Of the former, 1,817,300, or between one third and one half, are participating in and receiving instruction in music.[23] There are no exact figures available on how much of this size and growth represents new construction. The largest percentage, however, has been in areas where such facilities could not have previously existed—largely the areas farthest from the great population centers. Serial publications such as newspapers and magazines concerned with the arts consistently report new, major construction in connection with this *samodeatel'nost'* activity. Clearly, the state does not consider the area of the arts an expendable branch of the economy to be curtailed in order to benefit some other. Art has been far too useful.

[23]All figures from *Kul'turnoe stroitel'stvo.*

III

Curriculums

The end of Soviet music education, as of all Soviet programs, is service to the State. The means is based on the philosophy that production in quantity will eventually yield the desirable quality. Thus we have the broad-based, pyramidal structure of the Soviet formal musical education system, supported in turn by a pervading system of organized and trained amateurism. The combination yields a cultural whole functioning much like the U. S. liberal arts programs. Each level of musical training is an integral part of the pyramid, and within each level there is a further horizontal gradation of quality. In any such system of ordered production of a "creative body" of individuals, certain things must be sacrificed. To assure genius, it is necessary to build on a broad base of talented individuals. To ensure such a "talent pool," one must recruit within standards which include the mediocre. Genius and mediocrity, both of whose qualities are intensified by narrow specialization, go hand in hand in the Soviet system. In filling a graduate "quota" the staff of a conservatory employs a double standard of values with the students. Necessarily, and in keeping with central planning, a certain number of students must continue. So, passing and even entrance requirements vary considerably from year to year and even from

semester to semester. But the Soviet system can afford the gross production of mediocrity if the state at the same time nets usefully developed talent. The individual dropped too late from the program to prepare himself fully in some other line may suffer some mental anguish, but there will inevitably be some place for him in the economy. What is more important is the fact that the state has been served.

The Pre-conservatory Machinery

There is very little music in non-music schools in the USSR. During the period of falling standards, from 1952 to 1955, singing and other "lighter" subjects were introduced into the regular curriculum in the mistaken notion that they would raise grade levels.[24] Many of those, including singing in grades 7 to 10, have been dropped, but there have been indications in the last year that music will be more carefully and generally introduced, even on the university level in the form of (required) appreciation courses. Real popular pressure rather than state policy seems to be behind the move. In parts of the Soviet Union, notably Estonia, good singing has always been traditional in all classes and situations. In Estonia, music is taught throughout the grades, and excellent church choirs still exist in those areas where the Russian Orthodox church has not supplanted the Lutheran.

The pre-conservatory music program covers eleven years. The eleven years are spanned by a variety of institutions, but the differences are external, subject matter being about the same. For the first seven years, the program is the same in either 7- or 11-year music schools. The entering, seven-year-old child may or, more probably, may not have had the 4-year "kindergarten" experience which is a feature of the Soviet educational system. If he has, he has had a good deal of group singing, musical games, and listening, since music is stressed in pre-school training (and apparently only there). For his first seven years the child in the music school follows the same basic study plan as his counterpart in a regular school. This makes it possible for a student to convert from the regular to the special curriculum at any level and with a minimum of disturbance of the teaching schedule.

Two other types of schools, created to solve special Soviet problems, also function at this level and deserve to be mentioned. During the war, part-time schools for working youth were organized; they proved so successful that they have been continued. Music has no place in these schools. The other type is that created to care for the many children orphaned or semi-orphaned during the war. These schools, experimental in nature, stress the arts heavily.

Especially gifted younger children, four- and five-year-olds, may enter the special music schools early. Provision is often made for such precocious creative display at some of the 11-year schools run in connection with the conservatories.[25] Normally, though, the

[24] A decision of 1951 set compulsory 10-year schooling as a goal. Evidently the time was not yet ripe, for from 30 to 50 percent were found to be failing in 1955. One of the first solutions tried was the lowering of standards mentioned.

[25] Soviet violinist, Leonid Kogan, in an interview with the *New York Times* (January 12, 1958) confuses *uchilishche* and the last years of an 11-year school. The reported interview gives the mistaken impression that only through the 11-year schools can one reach the conservatory. Kogan himself attended one of these schools—that affiliated with the Moscow Conservatory.

child shares, until he is 14, the same studies with all Russian school children. Most of his first four years' school time will be taken up with grammar, reading, writing, and arithmetic. In the fifth grade, he will begin studying a foreign language. By the end of the seventh grade he will have had four years of history, four of geography, three of biology, physics for two years, and chemistry for a year.[28] But the specialists's course is artistically oriented, and his teachers are musicians. In addition to his regular work, the student is expected to spend extra time (the school week is six days long) on his specialty. Older students play in orchestras and prepare local recital performances. Many schools maintain a connection with some farm or factory which acts as a sponsor or patron. The patron organization sees to certain needs of the school, and this connection with a producing element of the economy continues up through the conservatory level.

At the end of the seventh year, stock is taken. The need of the higher institutions are weighed against the achievement of the graduating 14-year-olds. Those who fall below the measure, whether now in 11- or 7-year school may (a) continue through the tenth grade in a regular school, (b) enter the economy as "unskilled," (c) enter one of the music *uchilishches* specializing in a finished, semiprofessional product. Those above the measure go on in music by whatever means seems best. Financial, academic, and geographical factors enter in here, but students may continue in an 11-year-school (transferring there from a 7-year school, if that has been their background), go to an *uchilishche* which offers what they want, or resume regular schooling, although advantage is rarely taken of this latter alternative. Before entering the eighth year in an 11-year school, the student must demonstrate considerable proficiency in his specialty. After satisfying this requirement, he is then allowed to take the regular entrance examinations: written tests in Russian language and algebra and oral tests in Russian literature and geography. The student entering an *uchilishche* must also pass a specialty examination, then written tests in language and mathematics and oral tests in literature, USSR history, and mathematics. In some of the republics, an additional test is required in the native language (Armenian, Georgian, Estonian, Tadzhik).

The eighth year is the beginning of intense specialization. For the next four years, the *uchilishche* is the fundamental institution and, for purposes of this report, remarks on the *uchilishche* will also serve to describe the situation in the last four years of an 11-year school, except where otherwise noted. The *uchilishche* is divided into seven faculties: piano, voice, folk instruments, choir conducting, theory, strings, and winds and percussion instruments. Exceptionally, where facilities for separate training are unavailable, such faculties as choreography and even painting are included. Not all *uchilishches* have all the basic faculties. The *uchilishches* connected with the conservatories in Leningrad and Moscow and some other conservatories do not offer folk instrument training. Only one of the six *uchilishches* in Georgia in 1957 did so. About one third of the *uchilishches* offer theory (at Moscow and Leningrad composition is taught unofficial-

[28] E. N. Medynskii. *Prosveshchenie v SSSR* (*Education in the USSSR*) (Moscow: Gosuchpedizdat, 1955), p. 84.

ly), and there is a small group of *uchilishches* offering only singing and/or choir conducting. There are three or four pedagogical musical *uchilishches* for training of kindergarten teachers. With these exceptions, the same course outline is used in all *uchilishches,* however the variation in function from school to school calls for extremes of adaptability in that program. The *uchilishche* whose purpose is frankly that of handling the future "semiprofessional" will offer more large ensemble training, class teaching methods, and *samodeatel'nost'* methods. An *uchilishche* geared to producing conservatory candidates concentrates on solo technique and small ensemble practice. The *uchilishche* which accommodates graduates from regular 10-year schools will offer a shortened two- or three-year course (sometimes one year) which is usually preparatory to the conservatory. It is not uncommon for a student to go from one *uchilishche* to another, in fact he is encouraged to do so when his ability suggests it. In the four *uchilishche* years, the regular three-year school program is partially included. The degree of inclusion depends on whether or not the student must be prepared to pass the *VUZ* (conservatory) entrance exams. Thus the conservatory-bound student musician continues some training in history, language, political economy, and especially a foreign language. However, time spent in these subjects is not always great and sometimes a student graduating from an *uchilishche* must expect to spend a great deal of time studying for the conservatory entrance examinations in these fields. Statistics indicate that *uchilishche* enrollment is small.[27] Classes are conducted like those at a conservatory and conservatory textbooks are used occasionally. There have been complaints about this,[28] but in as varied programming as *uchilishches* offer, it would be difficult to standardize.

All graduates of the specialized schools of the *tekhnikum-uchilishche* level are required by decree to spend three years in that field. In practice, in music, this does not always happen. The music field is large, but trainee-musicians are maintained in a still larger number at this level in order to meet the state-set conservatory requirements. The best if not all of the available jobs are snapped up by conservatory graduates or by dropouts from the conservatory. Promotion within the ranks of the music economy is relatively infrequent since vacancies are filled from preferred conservatory graduate lists. The *uchilishche* graduate may go on to the conservatory, assuring himself of added "stipend" years and better job opportunities; he may enter the highly respected regular teaching profession after some additional pedagogical training; or he may choose to enter some unskilled branch

[27] Here is an example of the occasional dubiousness of Soviet published statistics. In one source (*Kul'turnoe stroitel'stvo*) the figure for all graduates in the arts *uchilishches* in 1956 is 4197. About half of these may be calculated as having been graduates in music. With well over 100 *uchilishches,* that yields a ridiculously low average of 20 students per graduating class, whereas observations indicate a far higher figure. The remote Chuvash *uchilishcle* had a total student body (in 1955) of only 95, but is exceptional since equally remote schools in Frunze (Kirghiz) and Ashkhabad (Turkmenistan) have 150 to 200 students. In 1956, again according to *Kul'turnoe stroitel'stvo,* some 1491 students were enrolled in art schools of higher education, about one-half of those in conservatories. Since conservatory graduates in 1956 numbered about 1000, according to reports in *Sovetskaia muzyka,* this figure, too, is certainly suspect.

[28] *Sovetskaia muzyka* No. 8, 1957 (Report on proceedings of the second All-Union Composers' Congress.)

of the economy, after a short period of technical training, and use his musical skill in finding the much-sought-after part-time job. None of these alternatives is considered unattractive by the young, average Soviet citizen, and that may help explain the relative popularity of the music training program.

The *uchilishche,* with its adaptability, is clearly one of the distinctive features of Soviet pre-conservatory musical training. Another, and one which uniquely pervades the entire system is the *samodeatel'nost'*. In as narrowly controlled a system as the formal one culminating in the Soviet conservatory[29] one immediately wonders what means there are for serving that function provided in the United States by hundreds of university and college schools and departments of music in addition to professional training; i.e., of accommodating the skilled amateur and training the discerning listener. Where is the liberal arts function which we take as not arbitrary, but as based on human need? In Soviet Russia, not one course in music is offered in any institution of higher learning except, of course, conservatories and a few pedagogical institutes. *Samodeatel'nost'*, then, tries to fill many gaps. The *samodeatel'nost'* musical circles meet as frequently as three times a week. Vocal and instrumental groups prepare concerts, attend professional concerts, hear lectures, and may study and take tests in their avocation much as they would in school. Individual members may take private lessons and the full- or part-time staff can usually accommodate them. Club and circle membership is based on loyalty of attendance and to a lesser degree on ability. Although few are turned down, members are segregated by ability. The best *samodeatel'nost'* choruses are among the best vocal ensembles in the Soviet Union. Factories, farms, unions, and other institutions will grant employee-participants paid leave if their *samodeatel'nost'* unit is one of those considered good enough to concertize. The number of chorus-instrumental ensembles has so increased, and become such a significant part of the cultural scene, that a special All-Russian Choral Society has been formed within the Ministry of Culture's *samodeatel'nost'* system. Its purpose is to hold conventions, to exchange ideas, music and staff, and to increase further the activity of such choral ensembles in the Soviet Union. This tremendous interest and activity is best understood by the American when he reflects that there are few church choirs in the USSR. The Choral Society also gathers funds to commission new works. Composers are already well aware of the significance of this growth as the many new works in the mass-chorus genre testify.[30]

Samodeatel'nost' participation is not limited to any age group. However, a special responsibility is assumed toward the younger members and the children of member and non-member workers of whatever institution the circle, club, and collective serve. This is the responsibility of discovering and handling young talent so that it will be channeled into the special music

[29] In 1956, graduates from all conservatories in the USSR numbered something less than 1500 —possibly less than 1000.

[30] *Muzykal'naia zhizn'* (Musical Life), a new union-wide magazine, the first such in 25 years, is now in print. It is geared to this organized, amateur level, the staff is settled and facilities supplied. After certain early miscarriages it appeared in early 1958 under the editorship of "proletarian" composer, Victor Belyi. "Belyi," in Russian, means white, and Moscow musicians say of the rather lackluster journal, "The editor is white (Belyi), the content grey, and the future black!"

program. The local *samodeatel'nost'* unit is a recruiting agent for the special schools. For instance, an unmusical worker at an auto factory may feel his son has musical possibilities. He will appeal to the local *samodeatel'nost'* instructor of music who, upon approving of the student's ability will start the machinery (through a factory committee, local village soviet, local party organ) necessary for his conversion to the specialized program. One is struck by the similarity of the *samodeatel'nost'* instructor, in his multiple functions, to the Western (and prerevolutionary Russian) private teacher of music. He fulfills precisely the same function and others besides.

While emphasizing the *samodeatel'nost'* service to the amateur one must also note the *samodeatel'nost'* role in providing the "parlor" or "family room" for every Russian home. The many clubs, houses and palaces of culture relieve the severe congestion of the Soviet dwelling, often little more than sleeping space in the large cities. The 19th century, idealized image of the Russian family and friends gathered in merrymaking around a private table and massive Russian stove has been replaced by one, just as idealized, of the same group engaged in healthy, collective recreation at the area, village or *kolkhoz* palace of culture.

Although the present report is no place for details, it is important to realize both the scope and limitations of *samodeatel'nost'* activity. Extracurricular regular school activities are strongly influenced by *samodeatel'nost'*. The children's pioneer palaces and houses (party run) are a *samodeatel'nost'* activity. As the number of such inclusions becomes overwhelming, the reason, and the inherent weakness, becomes more and more obvious. Spontaneous, undirected amateur activity hardly exists in the Soviet Union. Activity requiring much space cannot be carried on comfortably in the typical Soviet dwelling, and no private clubs exist. It is in the interests of the state that all group activity of whatever kind be controlled and directed into channels best cut out to build communism and that such activity take place in state, party, or labor union palaces and houses of culture. It is in this light that the Soviet concept of "liberal" arts becomes all too transparent. The amateur-dilettante flavor of naiveté and chance is missing. Without going further into the aesthetics of amateurism, one may say that Soviet composers and musicians are becoming increasingly alarmed at some failures of the system. Composers at the second All-Union Congress of Soviet Composers (March-April, 1957)[31] blamed the mass education system for their feeling that the contemporary audience was being lost. Ethnomusicologists complained that singing was no longer to be heard in the countryside. "What is the use of our beautiful palaces of culture when they frighten men away?" asked one musicologist.

The situation was perhaps exaggerated at the Composers' Congress. The tremendous program and material outlay for *samodeatel'nost'* has no doubt served many of its purposes. Nevertheless, the lack of a truly amateur base (or, rather, its replacement by an artificial, party-directed quasi-amateurism) has caused a qualitative weakening. There is more evidence of the loss of quality to be observed at the conservatory level.

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[31] *Sovetskaia muzyka*, Nos. 8, 9, 1957.

The Conservatory

At the beginning of this section (III) the problem of waste of student personnel was discussed. In itself, the problem does not seem to fret the state since the individual is expendable. But should that problem be followed by loss of standards and, finally, loss of produced quality, then the injury to the state would be serious. This is not to say that things are already this bad in the Soviet Union, but it is what lies ahead on the most probable path of development from the present situation. Since the success or failure of the conservatories is the success or failure of the state in the musical area, we will investigate them at somewhat greater length.

The "conservatory level" concept is a mistaken one. In the Soviet Union, the majority of conservatories serve as "farm" schools for the minority. Theoretical equality is belied by student and faculty hopping from one to another in a tacitly understood order of quality. The Mecca is Moscow. At what point in the 40 communist years the Moscow Conservatory gained ascendancy over the Leningrad, no one knows, but that it has is grudgingly admitted in Leningrad. Moscow, then, is the leader of the three at the top (with Leningrad and Kiev). Among the others there are various rankings. The more prideful of the republics, Armenia and Georgia, like to feel themselves free from the pecking order, but Armenian and Georgian student transfers to Moscow are not uncommon, and a big brother relationship exists between the Erevan (Armenia) and Moscow conservatories. A fast look at biographies of the youngest Uzbek composers shows many of them switching from the Tashkent to the Kazan Conservatory, but, significantly, none from Kazan to Tashkent. The strong musical traditions of the Baltic states may now be re-emerging after the intensive Russification campaign beginning in 1940 and resumed after the war. The conservatory production, however, is not impressive. Each conservatory has, legally, a geographic area of responsibility. Only the Moscow Conservatory is held responsible for supplying musical cadre to the entire Soviet Union.

The official curriculum, by discipline, for all the conservatories is the same and is assigned each year by the Chief of Operations of Educational Institutions. All conservatories have faculties (and majors) in piano, voice, musicology, orchestral instruments, and choral conducting. All but Gorky, Lvov, Novosibirsk, Odessa, Saratov, and Tallin offer composition; and all but Baku, Gorky, Erevan, Kazan, Leningrad, Tallin, Tbilisi, and Moscow have a folk instrument specialty. The conservatories at Alma-Ata, Vilno, Riga, and Tallin have cinematographic courses. Opera and symphony orchestra conducting is offered only at Kiev, Leningrad, and Moscow. In almost every case, the composition department (except where orchestral conducting is offered) is the smallest and voice is the largest. Each specialty includes four subject cycles: social-political (Marxism-Leninism), specialty, theory-history, and language-physical education. For the musicologist, the second and third cycles merge, so that he has a three-cycle course. In all specialties, cycle I (Marxism-Leninism) and IV (language-physical education) are the same. All students take 462 clock hours (26 semester hours) of Marxism-Leninism (four courses: communist party history, political economy, dialectical materialism, bases of Marxist-Leninist aesthetics), 140

(clock) hours each of a foreign language and PE, and at least 106 hours of foreign music history, 122 of Russian music history, including Soviet, and 70 each of analysis and harmony.

Beyond that, there is great variation in courses, as would be expected, and in required hours for graduation, as may not be expected. Semester hours required for the composition major over the five-year course are 122½; for a major in choral conducting, 238. These are the extremes. The different nature of the two fields somewhat tempers this difference. The conductor is engaged in much supervised practice, whereas the composer is expected to devote much spare time to creative thought. The singer's schedule, 192 semester hours, is second to the choral conductor's in number, but is considered by students to be the most exacting of all from point of time.

Class size is controlled by central decree. In large conservatories separate courses in non-specialty cycles are offered the individual specialty groups. Piano students, for example, take sophomore theory separately from, say vocal students. Lecture classes are unlimited in size, regular classes must have not more than fifteen students. Piano accompanying classes must not be larger than two, chamber groups not larger than four, and, with all the solemnity of law, the Ministry of Culture decrees that string quartets shall consist of not more than four students.

The study plan for all orchestral instrument majors is much the same. They take two or three hours of private lessons a week throughout the five years. They also enroll for piano and orchestra the first four years. As in all specialties, the load lightens considerably in the fifth year. The extra hours required of string instrument majors are in stringed instrument history. Award of a diploma also depends on satisfactory presentation of a solo program, and appearance with a chamber group, and with a quartet (for strings), and demonstration of sight reading skill.[32] Sub-specialty ranking appears on the diploma, as it does in all specialties. These are concert artist, orchestra soloist, teacher. Each step in "rank" theoretically limits the choice of jobs before the applicant.

The piano (or organ) specialty is divided into the sub-specialties concert artist, concertmaster (in Soviet usage, *repiteteur* or accompanist), and teacher in piano class. Two and three hours of lessons a week are again scheduled, plus one hour a week of accompaniment work (*kontsertmasterskaia*). The relatively low (130½) number of required semester hours is explained by the absence of any large ensemble work (and by no lessons in addition to lessons on the regular instruments, as in the violin major, for instance, which requires piano study). The practice teaching assignment in semesters five through eight (years three and four) is in a music 7-year school and in semesters nine and ten, in an *uchilishche*. Organ majors spend an additional sixteen hours in their specialty giving them a graduation requirement of 146½. Graduation also requires a recital and an ensemble appearance.

Voice specialists may major in opera or concert-chamber work. As men-

[32]The foregoing and following statistical breakdown does not include the folk instrument specialty, since study plans were not available. Information is based on interviews and posted study plans. The folk instrument major is very important in those schools offering it. Central Russian and Ukrainian instruments are emphasized. Georgian and Armenian folk instruments, though vastly more developed and sophisticated than Russian, are taught only through the *uchilishche* level.

tioned before, they are the busiest in a conservatory. Voice lessons (three hours a week) continue through four years. Beginning in the second year, both majors start opera class, dropping it for opera studio in years four and five if the conservatory has an opera studio. The last two years (opera studio or its equivalent) are almost wholly given over to performance and preparation for performance. Six hours a week are devoted to it plus actual performance time. Unlike instrumental and conducting majors, the hard-worked singer is not required to attend certain "required" concerts. Diploma work includes a recital and, for opera majors, participation in a major role.

The choral conducting specialist may major in choral conducting or choral art teaching. The tremendous semester hour requirement (238) is due to an eight-hour a week choral class which is the core of the practical work and which continues through the last year. Additionally, the student conducts a choir of his fellows for at least two hours a week throughout the five years. His practice teaching includes work with *samodeatel'nost'* groups as well as 7-year and *uchilishche* schools. The choral conducting major must also participate in small (four to six students) classes in (folk) polyphony and harmony.

The choral conducting department is tacitly recognized as the "accommodating" discipline. Soviet logic requires that the popular, but unschooled, singer-sailor in the Baltic fleet, the mountain singer from Bulgaria, the small town guitarist-folk singer from Viet-Nam be given immediate access to higher musical education. Thus the choral conducting "freshman" may be an older man, certifiably proletarian, unable to read music and quite ignorant of music theory. His program of study is geared to his destiny which is usually that of returning home better equipped to enrich the local musical life. The level of accomplishment upon graduation is often not sufficient to have entered the conservatory in another discipline. On the other hand, the "folk type" may well develop remarkably and be switched to one of the other disciplines. Such cases are not frequent, but they are infinitely rewarding inasmuch as they support the theory of emerging proletarian ability.

The opera-symphony conducting student has been specially chosen. He may occasionally practice with hired groups. He also takes special courses in counterpoint and harmony designed for conducting majors only. Of the total training hours in this specialty (2215), 1204 are scheduled with the use of a symphonic or opera orchestra. As already indicated, however, this is euphemistically expressed in the study plans. Only a fraction of that time is on the podium. For a diploma test, the student conductor is required to conduct a symphony program, an opera, and to rehearse a work on sight, chosen by the diploma commission. Again, this is the counsel of the study plan. In observed diploma tests the student is given an hour to rehearse one work.

Musicology is an exactly defined occupation in the Soviet Union. This fact, apparently peculiar only to the Soviet Union, is reflected in the conservatory study plan for musicology majors. A musicologist may either major in history and theory, or in musical folk art. In either major, his specialty cycle time is shattered into seventeen separate subjects (cf. 15 for conducting, eight to 12 for the others). Total time spent on his 5-year research specialty is only 140 hours (cf. 462 hours

for Marxism). His course stresses history and literature of foreign music (272 hours), Russian music (211), music of the USSR minorities (51), and Soviet music (71). Lecture techniques and practice occupy 166 total hours (10 semester hours). The student-musicologist must demonstrate ability in his specialty (an ethno-musicological exercise or thesis in a special field) for his diploma. In addition, his is the only musical discipline in which the graduate is required to pass a test in dialectical and historical materialism. Part of his academic obligation, scheduled for vacation time, is practice in the field. In his third year, he is expected to work in museum archives and libraries. In his fourth, he takes part in the editorship of papers and magazines. During holidays, he is expected to go on ethno-musicological expeditions of not less than a month's duration. Folk music specialists are expected to go on two such expeditions. Because of these additional activities, the actual classroom hours for the major are comparatively lower. Only the composers have fewer semester hours than the musicologist's 147½ required to graduate.

Composers, with a required load of 122½ semester hours, are also expected to spend time in the field on ethnographic expeditions and on trips to acquaint themselves with the optimistic realities of the building of communism. This fills their creative arsenal with the materials of socialist realism, the dogmatically conceived but generally undefinable principle of Soviet Art. The composer has two hours of individual composing lessons every week during his five-year term at the conservatory. The student composer has an opportunity to hear his work occasionally though by no means as frequently as once a week as reported to this writer in 1957. Performance depends on a variety of factors and finally rests on the ability of the professor to organize, cajole, and convince some performing group to play, a procedure evidently international. In Moscow the orchestras occasionally available to the composer are the conservatory orchestra, the conservatory opera orchestra, the city philharmonic (not the Moscow Philharmonic) and the Moscow University *samodeatel'nost'* orchestra. The composer's diploma work includes the composition of specified works under "prize" conditions and productive participation in a theory colloquium.

Large amounts of piano are included in each of the specialty plans. Orchestral instrument and choral conducting majors take eight semester hours, spread over the first four years, and voice majors add one more hour the first semester of the fifth year. Symphonic conducting majors have 12 semester hours of piano at 1½ hours a week for four years. Composers and musicologists have an additional 1½ semester hours in the ninth semester. Although a minimum level of piano ability is required for graduation, there is no piano requirement for entrance to graduate work.

The specialization in the conservatory is quite noticeable. The non-music subjects, aside from military training for men, are mostly in cycle I. Students refer to this group as "Marxism" and do not differentiate between courses. They seem neither particularly interested (except for the student "politicals") nor resentful, but treat the political courses as just a bit duller than physical education.[33] Although

[33]The sports program at most conservatories seems well developed. Some of the "teams" at the Moscow conservatory play other *VUZ* teams, occasionally in large stadiums. All who are physically fit are required to take two years of sports activity.

the posted schedules call for the "Marxism" cycle only through the fourth year, some students are still taking it in the fifth year. Dull or not, the students take the Marxism-Leninism series seriously. Only through bad grades in Marxism-Leninism, or in their specialty, can they lose their stipend. The political courses serve, too, as social controls on the students in their spare time. Outside factors affect the grades: discipline, attitude, the student's participation in social work (volunteer time at factory and farm clubs), and *komsomol* or party participation. Elsewhere on the political front, all conservatories have a local unit of the *komsomol* (Young Communist League) which provides the party tie on the student level. The organization usually has office space in the conservatory proper and is responsible for conduct and ideological direction of the students. It is theoretically operated by students with the aid of an adviser. In responsible posts, it seems to attract "types" who are willing to give up much time to politics and agitation.[34] The *komsomol* unit works naturally into the cycle I program and often does a service by keeping the presentation there pertinent to the rest of the curriculum. In common with all other Soviet establishments of whatever nature, the conservatory has a unit of the Communist party. In spite of the demanding discipline of the party, some students join their professors as members. Instrumentalists who have won places in international contests are particularly encouraged to join, thereby setting an example. It is useless in this space to debate the career advantages or disadvantages of party membership. Certainly, in some cases, it helps: graduate musicologists usually seek to join. Yet disciplinary measures for a given infraction are far more severe for the party member than for a nonparty member.

The language requirement is fulfilled so as to aid the specialty program (musicologists take the language they will use in their specialty, vocalists take Italian). But aside from these, there are no formal opportunities for any but musical training. Theoretically, it is possible for the student to take a night class in some other discipline and at some other *VUZ*. In practice, the time demands of the conservatory seldom permit this.

At the end of the fifth year, the student, unless he is chosen for graduate study, finally enters the economy. The negotiations for positions are conducted throughout the student's 5th year. He indicates his first three geographical preferences, is interviewed and reinterviewed. In the meantime, the openings are being assembled in the Ministry of Culture. At a given time the conservatory and ministry staffs meet and match desire to need. Preference is given in order of graduation rankings, and diplomas have certain limiting entries on them. Family situations are considered. The student's "citizenship" dossier is given particular attention. Finally the student is interviewed again and told of his assignment. If he is dissatisfied he is given a certain time to assemble adequate reasons for another assignment. When the assignment becomes final it is legally binding and the graduate must stay on that job for three years after which he is free to compete on the open market.

[34] In the past, and perhaps still today, students who are extremely active in party affairs have posed a difficult problem for the professor. Although grades are strictly on a performance basis according to theory, other VUZ reports indicate that there is a reluctance to grade the "politicals" down.

Failure to assume the assigned duties carries severe penalties. The conservatory, as the responsible organization, files suit against the graduate in the city court. Usually a fine is levied considered equivalent to the state's expenditure for the student's education. The assignment is rarely refused.

As mentioned earlier, the various conservatories have specific geographical areas for which they supply the musical cadre. The Moscow Conservatory, the sole exception, serves the entire Soviet Union. This poses a difficult problem for the graduating student at Moscow. Moscow jobs are sufficient to accommodate the conservatory graduates, yet the policy is to assign only a proportionate amount to the capital city. Assignment far from the center is the virtual equivalent of exile to the typically Moscow-oriented Russian mind.

There is a job for everyone. This tends to create uneconomical situations from the Western point of view: large bands in small cafés, full orchestras for pre-movie concerts which may last an hour, band concerts in deserted parks. The practice provides "live" music for kindergarten and nursery programs[35], unannounced street concerts, and large hotels staffing so many bands that a diner in one room can hear as many as three at one time. The practice swells the ranks of the *samodeatel'nost'* and the cadres of "folk song archeologists" in the field.[36] Few of these occupations pay very high wages. Actually the recipients of most of these positions are simply more individuals sacrificed to the fulfillment of the plan. The real fruit of the entire music education system is to be found among those who go on into graduate work at one of the few conservatories offering it.

Graduate School

On the graduate level, specialization reaches its maximum. Composition students simply compose. They have no more piano lessons, no political courses, and no further progress tests in anything but their specialty. The program amounts to institutionalized private teaching and whatever field work called for by the specialty. Vocalists and instrumentalists prepare and give concerts. Graduate work towards the first degree (*kandidat*) lasts three years during which the student is called not "student" but "aspirant." Receiving the *kandidat* degree requires the writing of a dissertation. All but musicologists have the alternative of simply receiving a diploma certifying a certain number of aspirant years completed. Certain state requirements govern the granting of the *kandidat* degree, as it is only rarely that a violin aspirant, for instance, will have, after perhaps eight years of nothing but his specialty, the inclination or ability to write a dissertation. Results of tests for entry into aspirantship betray the narrowness of the curriculum. Piano majors, displaying an awesome technical proficiency in their prepared pieces, are not able to answer simple historical questions. As has been mentioned, there is a special history series just for piano ma-

[35]For a one-half hour session of ring dancing for about 40 to 50 6-year olds at the Leningrad Pioneer Palace, a 10 piece orchestra was provided. On inquiry, the directress said that such an orchestra played every day.

[36]Many jokes are based on the crowded conditions in the field during "open season" on folk songs. One concerns two collecting groups stealing songs from one another. In another, just before the season opens, *kolkhoz* workers are grouped around a table under the watchful eye of the *kolkhoz* boss, busily making up songs about Soviet leaders. In yet another, one institute humiliates another by "planting" false folk songs for their victims to "discover."

jors. Even more surprising, the piano major cannot always easily harmonize uncomplicated tunes at the keyboard. His "theory for piano majors" has been too weak. The state of affairs is not a happy one and its implications are painfully well known to the excellent staff members at many of the conservatories. Pending a change in the system, however, most of these "specialty-strong, support-weak" students are admitted, depending on current quota requirements, into aspirantship, and the state is served.

Upon completion of graduate school the graduate is free to compete on the open job market. His theoretical three-year obligation to the state is considered fulfilled by his stint of graduate study. In point of fact, favorable career arrangements will have long since been made for outstanding aspirants. The successful violinist will already be registered with the State Concert Bureau and will have made some short concert tours. Any talented composer will already have had a taste of the benefits of the Union of Soviet Composers through commissions and granting of free time. Musicologists will have already seen their work in print. These are the cream of years of intensified specialization. They have become special members of the economy, the upper intelligentsia. They must succeed.

This is not the place to make any final judgment on whether or not the Soviet system works. Its most obvious product is mediocre musicians, but that shouldn't be too surprising, and, in any case, it doesn't matter so long as some masterful musicians are produced as well. It seems too early to tell about that, however. Some names of younger composers are becoming familiar, but the established Russian musicians squirm under the load of the knowledge that they are all too few, and much too much alike. Moreover, the young Soviet musician practices under conditions—we have said nothing about those conditions here—which some Western observers feel strangle the arts, however many satellites they send aloft.

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A Study of the Relation Between Certain Mental and Personality Traits and Ratings of Musical Abilities

JOHN C. COOLEY

RESEARCH in music education has outlined two points of view as to the nature of musical talent. The differences between these two points of view have been manifested particularly by differences in approach and technique of study.

One approach can be categorized broadly as concerned with talent testing. Seashore,[1] the most widely known of musical talent testers, selected certain psychological and aural factors of musical talent and constructed tests designed to measure these factors. His approach to the enigma of musical talent was an analytical one. Seashore speaks of this approach as "the specific theory of measurement."[2] By this is meant that each specific subtest in the Seashore battery must be validated in terms of the specific thing that it is supposed to measure rather than in terms of complex musical functions.

The Seashore tests and other talent tests of a similar nature have been used in numerous research studies which can be summarized broadly as follows: musical talent test scores have not been found to be closely correlated with intelligence nor with various personality traits. These findings have resulted from cross-sectional types of studies.

A second approach to the study of musical talent is represented by that of several German researchers. This approach to the problem of musical talent has been, for the most part, a *Gestalt* approach using broad, functional criteria of musical talent. In a summary of some of these studies Mursell points out that the findings indicate a high relationship between musical ability and general ability. Mursell points out in a second summary of several of these studies that the findings indicate that "the very musical child inherits a general high grade personality."[3]

Research has shown the psychometric approach to the study of musical talent to have some validity, but it apparently has not developed adequate indexes of functional musical ability. With low validity coefficients the Seashore battery is able to tell which individuals could not be successful in music, though it cannot tell which individuals *will* be successful in music. Research has further given reason to believe that not all musical persons will be good performers.

The present study sought to test further the values of using a psychometric approach to the study of musicality by determining the relation of certain standardized tests of mental

[1]Carl E. Seashore, *Measures of Musical Talent*. (New York: Columbia Phonograph Co., 1919) and Carl E. Seashore, *Measures of Musical Talents*, 1939 revision (Camden, New Jersey: RCA Victor, 1939).

[2]Joseph Saetveit, Carl Seashore, and Don Lewis, *The Revision of the Seashore Measures of Musical Talents* (Iowa City, Iowa: University of Iowa Press, 1939), p. 48.

[3]James L. Mursell and Mabelle Glenn, *Psychology of School Music Teaching* (New York: Silver Burdett Company, 1938), p. 38.

and personality traits to general musicality and to functional musical abilities as determined by ratings made by professionally qualified people.

The test-group used in this study consisted of 180 undergraduate students at Michigan State University who were enrolled as music students at the close of spring term 1951. The group met the requirements of the study: (a) it was a musical group, and (b) requisite data could be gathered from it under favorable conditions.

This group of students were by choice majoring in music. Some of them had begun music study as early as six years of age; only two had not begun music study prior to entering college. The average age at which music study began was 9.45 years with modal age, slightly higher, of ten years. The standard deviation of the distribution of ages at which music study was begun was 3.13. One standard deviation above and below the mean (ages 6.32 to 12.58) included 113 students, 65.6 percent of the total group. The group included 69 freshmen, 28 sophomores, 46 juniors, and 37 seniors.

All of these students were doing college work toward the Bachelor of Music degree or the Bachelor of Arts degree with a major in music. They were divided by curriculum as follows: (a) applied music, 30 students, with emphases on applied music study, performance, and theory; (b) school music-instrumental, 41 students, emphasizing teaching ability with proficiency on band and orchestral instruments; (c) school music-general supervision, 72 students, emphasis on teaching ability with proficiency in vocal music teaching, but including a general review of band and orchestral instrument teaching; (d) theory of music, 14 students, with concentration of work in theory and composition beyond that of other music curricula; (e) music therapy, 5 students, with concentration of work in psychology and in the therapeutic uses of music; (f) science and arts, major in music, 12 students, large amount of work outside of music with applied and theoretical music courses toward a major in music. There were 4 students whose curricular choices could not be determined.

All of these students were required to complete a minimum of two years work in applied music and were divided in this area as follows: piano, 66 students; voice, 41 students; woodwind instruments, 32 students; brass instruments, 19 students; string instruments, 16 students; organ, 4 students.

At the time of college entrance each of these students was required to appear for an audition. Successful audition was requisite to enrolling for college credit in applied music. Only one student in the group was not enrolled for college credit in applied music.

All of these students were required to take two years work in theory. Final first year theory grades were distributed as follows: *A* 21.93%, *B* 39.37%, *C* 30.96%, *D* 3.87%, *F* 3.87%. *A* is the highest passing grade; *D* is the lowest passing grade; *F* is a failing grade.

The data for the study were obtained from three basic sources: standardized tests, ability ratings, and applied music grades.

Standardized Tests

1. *The American Council on Education Psychological Examination,* College Level, 1949 edition. According to the manual of instructions, "the purpose of the *Psychological Examination* is to appraise what has been called scholastic aptitude or general

intelligence, with special reference to the requirements of most college curricula."[4] The examination consists of six tests: three quantitative tests and three linguistic tests. The test is scored so as to yield two separate scores (quantitative and linguistic) as well as a total score. In this study these scores have been designated throughout as *ACE-Q*, *ACE-L*, and *ACE-T*. *ACE* will refer to the test in general.

2. The *Cooperative Reading Comprehension Tests*. These tests provide four separate scores: vocabulary, speed of comprehension, level of comprehension, and total. According to the information supplied concerning the construction, interpretation, and use of these tests "the test is designed to measure the thinking processes in reading on the grounds that effective reading is not a mechanical process but an active reasoning and associational process."[5] Scores from these tests will henceforth be referred to as: *CRCT-V* (vocabulary), *CRCT-R* (rate), *CRCT-C* (comprehension), and *CRCT-T* (total). *CRCT* will be used to designate the test in general.

The two tests listed above were administered to the test-group as part of the Michigan State University orientation program, prior to or during the first term of registration. Testing conditions were standardized, controlled, and scored by regular university examiners.

3. The *Bernreuter Personality Inventory*. This is a paper and pencil test of personality. It is a multi-trait test and "was constructed to determine the feasibility of estimating more than a single personality trait at a time. It assumes that the integrated behavior of an individual in any situation may be interpreted from various points of view."[6] Bernreuter supplied the test with four scoring keys. Flanagan[7] has provided the test with two additional scoring keys. Both sets of keys were used in this study. These several scales are described (in part) by Bernreuter as follows:

B1-N. "High score . . . shows a tendency toward a neurotic condition." Conversely, a low scorer "is an emotionally stable person."

B2-S. The high scorer on this scale "is a self-sufficient person; the individual scoring low is dependent on others."

B3-I. The high scorer on this scale "is introverted . . . and is given to autistic thinking." The low scorer "is extroverted."

B4-D. The high scorer is "dominating . . . He is self-confident and aggressive." The low scorer is "submissive. . . . He lacks self-confidence."

F1-C. "Persons scoring high on this scale tend to be hamperingly self-conscious and to have feelings of inferiority." "Those scoring low tend to be wholesomely self-confident and to be very well adjusted to their environment."

F2-S. "Persons scoring high on this scale tend to be non-social, solitary, or independent. Those scoring low tend to be sociable and gregarious."[8]

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[4] *American Council on Education Psychological Examination: Manual of Instructions*, 1949 edition (Princeton, New Jersey: Educational Testing Service, Cooperative Test Service), p. 2.

[5] *Cooperative Reading Comprehension Tests, Information Concerning Their Construction, Interpretation, and Use* (New York: Cooperative Test Service, 1940).

[6] Robert G. Bernreuter, "Validity of the Personality Inventory," *Personnel Journal*, XI (April 1933), 383.

[7] Irving Lorge, "Personality Traits by Fiat: A Correction," *Journal of Educational Psychology*, XXVI (December 1935), 654.

[8] Robert G. Bernreuter, "The Theory and Construction of the Personality Inventory," *Journal of Social Psychology*, IV (November 1933), 402-403.

The Bernreuter *Personality Inventory* was administered by the University Counseling Center for the specific purposes required by the study. The test situation was conducted by experienced examiners; results were machine scored.

4. The *Seashore Measures of Musical Talents*. This instrument consists of a battery of six tests. Series B tests (designed for use with musical groups) were used in this study. The 1939 Revision[9] of these tests was employed, which yields scores of ability to discriminate between differences in pitch, loudness, time (duration), timbre, and rhythms. The sixth test is one of tonal memory. Music department examiners administered the Seashore tests, which are required of all entering students seeking registration as music majors.

Musical Ability Ratings

The study required ratings of certain musical abilities. These ratings were made by fifty-one members of the University music staff and were secured by the use of a carefully planned procedure. Ratings of the following musical factors were made: (a) musicality, (b) ability to sight read music, and (c) ability to perform. The assistance of the music faculty of the University was enlisted in the following way:

First, the general outline of the study was presented verbally and the general rating procedure explained. Secondly, a letter was sent to each member reviewing the purpose and technique of the study and specifying the musical abilities for which a rating was needed. A variety of definitions for each musical ability was given. Each faculty member was asked to state his reaction to these definitions as to adequacy and pertinency. In this way consensus definitions were arrived at for each musical ability. The letter also gave each faculty member an opportunity to list those individual students for whom ratings based upon adequate contact would be made. A checklist of students was included.

Upon return of these checklists a second letter was sent out with a discussion of the rating procedure and individual rating scale forms for each student included on the particular checklist. The rating instructions were made explicit according to procedures delineated by Adkins.[10] The final form of the definitions of abilities in the rating scales follows:

Musicality.—Having a responsiveness to music; having a fondness or intelligent appreciation for music; having a sensitivity to musical feeling; having an inner urge toward music.

Ability to sight read.—Ability to perform music of a reasonable grade of difficulty at sight on his major or minor instrument. Ability to perform music of a reasonable grade of difficulty at sight on his class instrument or in the vocal class. In general, ability to organize musical material into an intelligible performance at sight.

Ability to perform.—Ability to organize studied or memorized music into a musical performance commensurate with his level of training and musicality before any audience. In general, ability to realize his musical potentialities in a performing capacity before any audience.

Finally, rating scale forms for individual students were included in this packet to each faculty member.

[9] Carl E. Seashore, Don Lewis, and Joseph G. Saetveit, *Manual of Instructions and Interpretations for the Seashore Measures of Musical Talents*, 1939 Revision (Camden, New Jersey: Educational Department, RCA Victor Division, Radio Corporation of America, 1940), pp. 4-5.

[10] Dorothy Adkins, *Construction and Analysis of Achievement Tests* (Washington, D. C.: United States Government Printing Office, 1947), p. 179.

Applied Music Grades

Grades received during consecutive school terms for the 1950-1951 academic year were selected for inclusion in the study. A score combining grades received in each of the three terms was arrived at by converting letter grades to quality points and summing. This procedure yielded "averages" which avoided use of decimals.

Musical ability ratings were scored on a scale numbered one through nine. The lowest three numbers were designated "lowest third," the middle numbers, "middle third," and the highest three, "upper third." The distribution of musicality ratings had a mean in rating scale units of 5.98 and a standard deviation of 1.51 and resembled a normal distribution with a slight negative skewness. The distribution of sight reading ratings had a mean of 5.68 scale units with a standard deviation of 1.51 and resembled a normal distribution but with flatness near the mean. The distribution of performance ability ratings had a mean of 5.96 scale units with a standard deviation of 1.45 and was roughly bell shaped.

Summary and Significance of Study Data

The test profile of the group.—The average scores of this group on the *ACE* were all above the sixth decile, with the *ACE-L* scores tending to be slightly higher than the *ACE-Q* scores. This difference tended to be reversed for the male music students. The observed difference for the total group was apparently related to the fact that there were more female students than male students. Average scores of this group on the *CRCT* were all above the sixth decile. A majority of the scores were above the estimated test population mean on all sub-scores. Average scores on the Seashore single test and on the six test average were all above the seventh decile; three were above the eighth decile. On all sub-tests, these scores tended to concentrate at the ninth and tenth deciles.

The means of scores for this group on all tests and sub-tests of the three batteries discussed above were found by statistical test to be significantly different from estimates of test population means, in each instance beyond the one percent confidence level (see Table 1). Graphs of these distributions further revealed striking similarity of shape characterized by marked negative skewness and a consequent piling up of scores at the upper extremities of the scales.

Four of the BPI averages for the total group were significantly different, some highly so, from estimated averages of unselected college groups. (Later discussion will clarify these observed differences.) On the scale of neuroticism (B1-N), Introversion (B3-I), Confidence (F1-C), and Sociability (F2-S), these differences were statistically significant beyond the one percent level of confidence.

Relation of music ability ratings to test scores.—An examination of complete correlation tables reveals the following facts: (a) These several test scores appear to be unrelated to applied music grades and to ratings of performance. (b) The *ACE* scores appear to be slightly related to ratings of musicality and of sight reading ability. Of the six correlation coefficients taken between the *ACE* scores and the ratings of musicality and of sight reading ability, five were significant correlations, beyond the one percent level of confidence. (c) The *CRCT* scores appear to be slightly related to the ratings of musicality and of sight reading ability. Of the eight coefficients taken between *CRCT* scores and the ratings

TABLE 1
COMPOSITE TABLE OF DECILE MEANS FOR THE TOTAL GROUP

Variable	*Mean deciles*	*S.D.*	*Estimated population mean deciles*	*Difference of mean significant at 1% confidence level*
ACE-T	6.37	2.67	5.5	yes
ACE-L	6.40	2.97	5.5	yes
ACE-Q	6.08	2.61	5.5	yes
CRCT-T	6.05	2.65	5.5	yes
CRCT-V	6.55	2.41	5.5	yes
CRCT-R	6.31	2.86	5.5	yes
CRCT-C	6.19	2.89	5.5	yes
B1-N	3.89	2.66	5.0	yes
B2-S	5.15	2.29	5.0	no
B3-I	3.18	2.53	5.0	yes
B4-D	4.83	2.46	5.0	no
F1-C	7.53	1.06	5.0	yes
F2-S	9.31	0.19	5.0	yes
*Seashore Scores**				
Pitch	7.57	2.70	5.0	yes
Loudness (Intensity)	7.11	2.49	5.0	yes
Time	7.39	2.52	5.0	yes
Timbre	8.55	2.17	5.0	yes
Rhythm	8.20	2.19	5.0	yes
Tonal memory	8.34	2.01	5.0	yes

*The test yields inverted decile scores which for reasons of consistency were reversed with the top decile as ten, the bottom as one for use in this table.

TABLE 2
PRODUCT-MOMENT CORRELATION COEFFICIENTS FOUND BETWEEN THE VARIOUS TEST SCORES AND THE RATINGS OF MUSICALITY, SIGHT READING ABILITY, PERFORMANCE ABILITY, AND APPLIED MUSIC GRADES

Test Scores	*Applied Grades*	*Musicality*	*Sight-reading*	*Performance*
B1-N	−.028 ± .07	.005 ± .05	.044 ± .08	.097 ± .08
B2-S	.149 ± .07	.107 ± .05	−.030 ± .08	.028 ± .08
B3-I	−.028 ± .07	.002 ± .06	.022 ± .08	.100 ± .08
B4-D	.023 ± .07	.130 ± .07	.054 ± .08	.043 ± .08
F1-C	−.055 ± .08	.099 ± .07	−.080 ± .08	.198 ± .08
F2-S	−.016 ± .08	.058 ± .07	−.034 ± .08	.040 ± .08
ACE-T	.074 ± .07	.305 ± .07	.242 ± .07	.039 ± .08
ACE-Q	.002 ± .07	.271 ± .07	.250 ± .07	.095 ± .08
ACE-L	.082 ± .07	.218 ± .07	.213 ± .08	.012 ± .08
CRCT-T	.111 ± .08	.201 ± .07	.215 ± .08	.100 ± .08
CRCT-V	.142 ± .08	.267 ± .07	.206 ± .08	.102 ± .09
CRCT-R	.117 ± .08	.249 ± .07	.222 ± .08	.094 ± .08
CRCT-C	.015 ± .08	.133 ± .07	.149 ± .08	.057 ± .09
S-Total	.074 ± .07	.230 ± .07	.254 ± .07	.103 ± .08
S-Pitch	.143 ± .07	.216 ± .07	.211 ± .08	.215 ± .08
S-Rhythm	−.117 ± .08	−.034 ± .08	.003 ± .08	−.101 ± .08
S-Time	.017 ± .08	.069 ± .08	.151 ± .08	.059 ± .08
S-Timbre	.050 ± .08	−.014 ± .08	.065 ± .08	.176 ± .08
S-Tonal Memory	.059 ± .08	.189 ± .07	.210 ± .08	.061 ± .08
S-Loudness	.116 ± .07	.213 ± .07	.187 ± .08	.012 ± .08
Age began music	−.054 ± .08	−.155 ± .07	−.271 ± .08	−.183 ± .08

of musicality and of sight reading ability, two were significant and four approached statistical significance at the one percent level of confidence. (d) The coefficients found between the above tests (*ACE* and *CRCT*) tended to be homogeneous, varying but slightly from coefficient to coefficient. (e) The coefficients taken between the Seashore scores and the musicality and sight reading ratings tended to be heterogeneous, varying both in size and sign. Of the fourteen coefficients taken between Seashore scores and the musicality and sight reading ratings, four were significant at the one percent level of confidence and two coefficients approached statistical significance at this level. (f) All of the significant coefficients tended to be homogeneous with a difference between the largest and smallest of only .09, and with a range from .211 between Seashore pitch scores and sight-reading ratings to .305 between *ACE-T* scores and musicality ratings.

Interpretations

The validity of these conclusions is based upon the limits of validity of (a) the technique of the study and (b) the implementation of this technique. In regard to the implementation of the study technique, it is not assumed that the several tests are accurate, finite, nor absolute measures of specific qualities.

Relation of intelligence and reading ability to musicality.—This study produced evidence that high intelligence and reading ability tend to go with musicality. The group of students utilized in this study was a musical group. For the tests of intelligence and of reading comprehension used in the study, group averages were significantly higher than the norms of unselected college groups; the majority of the individuals in this group scored above the unselected population averages. This was the case on the distributions of scores of the intelligence test and on the four distributions of scores on the test of reading comprehension.

This study produced evidence that musicality and ability to sight read music are significantly, though not closely, correlated with intelligence and reading ability. The smallness of this correlation suggests that although this group had high intelligence and reading ability ratings, musicality cannot be accounted for by intelligence and reading ability ratings alone. It is to be noted that this correlation was more consistent and was generally of greater magnitude from test to test than correlation of musicality and sight reading ability with the Seashore scores.

Relation of Seashore scores to musicality.—This study showed evidence that high scores on the Seashore tests go with musicality. All Seashore averages for this group were significantly higher than the means of an unselected population. Despite the fact that these Seashore averages were all high for this group, correlation coefficients between these scores and various musical ability ratings were low, most of them not significant. These facts would tend to suggest that those things measured by the Seashore scores go with musicality but apparently do not constitute an adequate measure of musicality for use with individual college music students.

The relation of personality to musicality.—The means of several of the Bernreuter sub-scores were significantly different from estimated means of the general college population. Significant differences were found for the means of the neuroticism, introversion, confidence, and sociability scores. This

was taken as evidence that college music students tend to differ in personality profile from unselected college students.

At this point certain inconsistencies in the Bernreuter scores must be pointed out. If we describe the results on this test according to the information provided by Bernreuter we must ascribe the following to the group studied.

1. *Low B1-N.* The individual who scores low on the B1-N scale is an emotionally stable person. He is rarely troubled by moods, by worries, or by criticisms of others. He is self-confident, and is a doer rather than a day dreamer.

2. *Low B3-I.* The individual who scores low on the B3-I scale is extroverted in the sense that he rarely substitutes day dreaming for action. He is emotionally stable and possesses the characteristics of those individuals who score low on the B1-N scale.[11]

The above results are obviously closely related and in close harmony; it is with the Flanagan keys that inconsistencies were observed. Research on the *Personality Inventory* (especially the Flanagan scores) has made apparent certain inconsistencies in the F2-S score indicating that "a high F2-S score is not consistently an indication on non-sociability. Examination and analysis of the Bernreuter scores of the same individuals indicate fairly definite profiles which seem to depict personality types. These profiles are determined by studying the B1, B2, and B4 scores (measures of neurotic tendency, self-sufficiency, and dominance) in their interrelationships and the B2 score seems especially important. Two profiles have been delineated tentatively. Profile I, it appears might be associated with a withdrawal tendency. Profile II, probably is indicative of leadership. In general, the evidence presented strongly supports the view that the profile approach to the interpretation of the Bernreuter scores presents a fruitful field for research."[12]

While it is the opinion of the writer that the group studied has a tendency toward Profile II described above, it must be noted that a different interpretation from the data is feasible.

Correlation coefficients between the personality scores and ratings of musicality, sight-reading, and performance, and applied music grades, were very low, none of them significant and not differing from chance correlations.

Summary

There is evidence that high intelligence and high reading ability as well as superior performance on the Seashore tests, tend to go with musicality. There is evidence that there is a slight, but significant correlation between intelligence and reading ability rankings, and ratings of musicality and sight reading ability, and that this relation is more consistent and of greater magnitude than that between the Seashore scores and these ratings of musicality and sight reading ability.

There is evidence that the personality profile of the college music student differs from that of the unselected college student. There is no evidence that personality traits are correlated with musicality or with ratings of functional musical abilities.

It is the interpretation of the writer

[11]Robert G. Bernreuter, "The Theory and Construction of the Personality Inventory," *Journal of Social Psychology*, IV (November 1933), 402-403.

[12]Walter F. St. Clair and J. Conrad Seegers, "Certain Aspects of the F Scores of the Bernreuter Personality Inventory," *Journal of Educational Psychology*, XXIX (April 1938), 311.

that this study in technique and implementation has pointed out weaknesses of studying musicality and functional musical abilities through atomistic and analytical procedures and has tended to point up comparative strengths of *Gestalt* procedures and psychology in such study. It has shown that functional musical abilities as well as musicality in general are more closely related to the general abilities of intelligence than to specific abilities of the Seashore variables.

Educational Implications

This study has re-emphasized the fact that use of test scores for selection of college music students and for their guidance should be subject to considerable caution. None of the test scores utilized in this study show sufficient correlation with criteria of musicality to be used successfully in predicting musical success of individual students. The value of such scores lies in the prediction and diagnosis of failure rather than of success. It must be remembered that such test scores give no indication of motivational factors which may have a compensating role sufficient to overcome inadequacies shown in test performance.

The inconsistencies between the Bernreuter and the Flanagan scores have already been pointed out. If, however, the interpretation of the writer is correct, that this group of music students may be characterized as stable and well-balanced and with out-going traits, then an interesting contrast presents itself with the introverted, emotional, and temperamental personality musicians are sometimes thought to possess. This is given added interest by the fact that of the group of 180 students used in the study 113 were in curriculums preparing them to teach in the public schools.

The results of this study have tended to lend support to the view that general intelligence is a concommitant of musical talent, and that other more specific abilities tend to go with musical talent as well.

Further Research

This study emphasized the homogeneous aspects of music students as a group, pointing out differences with unselected college student groups. The study has pointed out that as a group these students were superior in several test performances and yet this superior test performance was only slightly related to functional musical abilities and to musical talent. Can research into this problem find independent variables that will show higher correlation with criteria? It is the feeling of the writer that musical talent and musical

TABLE 3
DECILE MEANS FOR THE CURRICULAR GROUPS

Curriculum	*No.*	*ACE-T*	*CRCT-T*	*Seashore T*	*B1-N*	*B2-S*	*B3-I*	*B4-D*	*F1-C*	*F2-S*
Applied music	28	5.89	6.42	7.85	3.84	5.73	3.07	5.13	4.27	9.37
SM-general*	71	6.28	6.24	7.74	3.56	4.96	2.83	4.89	7.09	9.21
SM-instrumental*	39	6.15	5.66	8.12	4.49	4.26	3.73	4.27	8.48	9.22
Theory	16	7.56	7.50	7.77	4.72	6.56	4.16	5.07	8.21	9.42
Science and Arts	11	7.55	7.00	7.44	3.99	5.52	2.59	5.27	7.09	9.37
Music Therapy	5	7.60	7.80	7.89	1.00	7.36	0.74	7.78	6.44	9.34

*SM—school music

TABLE 4
DECILE MEANS FOR THE INSTRUMENTAL GROUPS

Instrumental Group	*No.*	*ACE-T*	*CRCT-T*	*Seashore T*	*B1-N*	*B2-S*	*B3-I*	*B4-D*	*F1-C*	*F2-S*
Brass	18	5.44	4.94	8.34	4.70	4.71	4.23	4.53	8.62	9.26
Woodwind	28	7.18	6.68	8.11	4.38	4.64	3.65	4.40	8.12	9.28
String	14	6.93	6.50	7.92	3.24	5.60	2.91	5.43	7.67	9.27
Piano	69	6.64	6.59	7.67	3.75	5.61	3.05	5.12	7.21	9.35
Voice	42	5.93	6.34	7.63	3.86	4.92	3.15	4.68	7.23	9.30

abilities of college students cannot be accounted for by an atomistic technique describing a multiplicity of specific factors. It is his view that an approach attempting to measure psychomusical patterns would be more fruitful. Such an approach might be implemented by attempting to measure (a) the Seashore variables in musical contexts, (b) musical interest, and (c) motivational factors.

While the data are skimpy, interesting to note is the fact that while there were small but significant correlations between several of the test variables and musicality and sight reading ability there were none between these test variables and performance ability ratings. No tests of the significance of difference between correlation coefficients were made.

While the homogenous aspects of the group were under study, differences within the group became apparent in test result averages for various curricular and instrumental sub-groups. It was not the purpose of this study to follow up these differences for the purpose of generalization. In some instances the smallness of the number in sub-groups made generalization unwise. It is interesting, however, that in some cases differences in means for sub-groups were approximately equal to a full standard deviation of the distribution. Tables 3 and 4 readily reveal these observed differences.

Ball State Teachers College

A Study of the Musical Preferences of a Select Group of Adolescents

DAVID T. KELLY

A SURVEY of the research literature in the fields of child development, psychology, and sociology reveals interest in the factors influencing development of musical preferences. These studies represent a variety of approaches to the subject, but none have explored specifically the effectiveness of school music training in the development of taste.

Several studies have shown that taste is a cultural phenomenon. Farnsworth states that musical taste is lawful in the sense that all social phenomena are lawful.[1] It is relative to a particular time and cultural area. In his later textbook on the psychology of music he reiterates that taste is lawful and asserts that the teaching of taste is a process of indoctrination in the culturally accepted materials of the period.[2] Lundin, in his textbook on the psychology of music, presents a similar concept: that there is a similarity in musical taste which is due to cultural conditioning.[3]

Other studies have shown that certain specific factors have influence in the formation of taste. Fay finds a tendency toward preference of serious music by students of above average musical talent.[4] Keston and Pinto attribute taste primarily to the factors of intellectual introversion, music recognition, and musical training.[5] Rogers finds a relationship between preference and school grade level.[6] Sopchak, in his study of emotional responses, finds a wide variety of reactions, and ascribes the differences to a great number of variables.[7]

Social pressures were found to have influence upon adolescent preferences in a study by Johnstone and Katz.[8] These researchers found that taste seems to be related to personal relations and friendship groupings. Wiebe found that radio song plugging improved acceptance of a song which was not well-liked at first, but that plug-

[1]Paul R. Farnsworth, *Musical Taste: Its Measurement and Cultural Nature* (Stanford: Stanford University Press, 1950), p. 81.

[2]Paul R. Farnsworth, *The Social Psychology of Music* (New York: The Dryden Press, 1958), p. 153.

[3]Robert W. Lundin, *An Objective Psychology of Music* (New York: The Ronald Press, 1953), p. 156.

[4]P. J. Fay and W. C. Middleton, "Relationship Between Musical Talent and Preference for Different Types of Music," *Journal of Educational Psychology*, XXXII (November 1941), 573-583.

[5]Morton J. Keston and Isabelle M. Pinto, "Possible Factors Influencing Musical Preference," *Journal of Genetic Psychology*, LXXXVII (March 1955), 101-113.

[6]Vincent R. Rogers, "Children's Musical Preferences as Related to Grade Level and Other Factors," *Elementary School Journal*, LVII (May 1957), 433-435.

[7]Andrew L. Sopchak, "Individual Differences in Response to Different Types of Music, in Relation to Sex, Mood, and Other Variables," *Psychological Monographs*, LXIX (No. 11 1955), 1-20.

[8]John Johnstone and Elihu Katz, "Youth and Popular Music: A Study of the Sociology of Taste," *American Journal of Sociology*, LXII (May 1957), 563-568.

ging had no effect upon acceptance of an initially well-liked song.[9]

In the light of the general agreement that taste is cultural and that musical training is important in the development of taste there is a clear need for an investigation of the effectiveness of the musical training being provided for adolescents by the schools. Such a study could provide valuable data for use in the design of school music courses and curricula, and in conducting guidance in music.

Purpose

The purpose of the present study was to compare musical preferences of a select group of musically experienced adolescents with those of the general population in order to determine to some extent the influence of musical training upon the preferences of the subject group. Relationships between certain factors of musical training and the expressed preferences of the subjects were also observed to try to determine some variables influencing these preferences.

Procedure

A questionnaire was administered to 262 high school music campers of the Florida State University Summer Music Camp, 1959, in order to determine a number of variables in the subjects' backgrounds and to establish a set of current musical preferences. Of the total number of questionnaires administered, 210 met the requirements of the study, while 52 were disqualified as lacking sufficient information.

The subjects were of both sexes (80 males, 130 females), ranging in age from thirteen to nineteen years. Admission to the camp was made upon the basis of some musical experience and the recommendation of a music teacher. The subjects were from Florida (84 percent), Georgia (12 percent), and Alabama, Louisiana, North Carolina, and Michigan (4 percent).

The instrument used for the study was an original questionnaire which provided information regarding age, sex, grade in school, instrument played, number of years of music study, organization membership at camp, and parents' preferences and musical training. It also provided information on the presence of record players, radios, and television sets in the homes of the subjects, and their preferences for these media for listening. Finally, the questionnaire provided a place for the subjects to name their ten preferences for music in general as well as for their popular music favorites in particular.

The information from the questionnaire has been tabulated and certain observations have been made. The subjects' preference lists have been consolidated and compared with local and national "top-ten" preference lists for the week in which the questionnaire was administered. It is assumed for the purpose of this study that the "top-ten" lists represent general population norms.

Results

Tabulation of the information from the questionnaire reveals several factors which help to describe the subject group. Table 1 indicates that a major-

TABLE 1
DIVISION OF SUBJECTS BY SEX AND GRADE IN SCHOOL

	School Grade					
	8	*9*	*10*	*11*	*12*	*Total*
Male	4	8	25	17	26	80
Female	2	20	37	43	28	130
All	6	28	62	60	54	210

[9]Gerhardt Wiebe, "The Effects of Radio Plugging on Students' Opinions of Popular Songs," *Journal of Applied Psychology*, XXIV (December 1940), 721-727.

ity of the subjects are females and that the eighth and ninth grades are represented by very few students. It may also be noted that only in the eighth and twelfth grades is the male-female ratio approximately equal. The largest grade group is that of the eleventh grade girls.

There was found an expected correlation between the averages of years of music study and grade in school as shown in Table 2.

TABLE 2

AVERAGES OF YEARS OF MUSIC STUDY BY SEX AND GRADE IN SCHOOL

	School Grade					
	8	*9*	*10*	*11*	*12*	*Total*
Male	3.9	4.3	5.0	4.9	6.4	5.3
Female	7.0	5.0	5.4	6.2	7.4	6.1
All	4.9	4.8	5.4	5.8	6.9	5.8

The one exception to the trend of increased musical training from grade to grade that was found in the case of eighth grade girls can be explained by the fact that there were only two subjects in the group, and it may be assumed that a larger number of subjects in the group probably would have given a more realistic average. There seems to be a slightly higher average of musical training for females than for males, but it is not certain that the differences would be found to be statistically significant.

Data given regarding the musical training of parents indicated that for 24 percent of the subjects both parents had had musical training, for 49 percent of the subjects either father or mother had had musical training, and for 27 percent of the subjects neither parent had had musical training. This distribution could be viewed as an expected normal one with the middle group decidedly larger than either of the almost equal extremes.

Questionnaire data revealed that 99 percent of the subjects' homes had radios, 96 percent had record players, and 93 percent had television sets. Students' preferences for listening to music showed no correlation with these figures.

Subject listening information indicated a preference for live performance in 59 percent of the cases, for record player in 16 percent of the cases, for television in 15 percent of the cases, and for radio in the remaining 10 percent of the cases. A later table will show some relationships of taste to the preferred medium of listening, exclusive of live performance.

Membership in camp musical organizations was found to overlap in a great many instances. Fifty percent of the subjects participated in more than one of the available groups.

In tabulating the data several variables were found in which some slight trends could be seen in relation to the preferences of the subjects. For the purposes of this study these preferences were grouped as classical, semiclassical, and popular, and it was assumed that tendency toward preference of classical music indicated a broader and more thorough knowledge of music. Greater preference of classical music was assumed to indicate a closer approach to the goal of the musical training and a "higher" achievement of taste development.

In the following tables the percentages are based upon the total number of titles named by the subjects in their preference lists. Because all subjects did not submit an equal number of titles there is no consistent relationship between number of subjects and number of titles for each of the tables, and it was not possible to determine statistical significance for any of the possible trends shown by the figures.

TABLE 3
MUSICAL PREFERENCE PERCENTAGES BY SCHOOL GRADE

Preference	*School Grade*				
	8	*9*	*10*	*11*	*12*
Classical	40%	43%	70%	68%	78%
Semiclassical	5%	24%	11%	13%	10%
Popular	55%	33%	19%	19%	12%

When possible, however, observations have been made of possible tendencies or relationships between the particular factor and the subjects' preference indications.

Table 3 shows percentages of musical preference by school grade level. The increase in preference of classical music and the decrease in that of popular music from the lower to the higher grades would lend support to the concept that preference is related to training, especially in view of the correlation between grade level and years of musical training as seen in Table 2.

TABLE 4
MUSICAL PREFERENCE PERCENTAGES BY SEX

	Classical	*Semi-classical*	*Popular*
Males	69%	8%	23%
Females	62%	16%	22%

Sex difference would seem to have little or no effect upon the musical preferences of the subjects, as can be seen in Table 4.

In Table 5 can be seen a slight tendency to higher taste in relation to the musical training of the subjects' parents. This tendency is so slight that it would very likely be insignificant statistically, but it suggests a need for a more closely controlled study of this factor in determining taste development.

TABLE 5
MUSICAL PREFERENCE PERCENTAGES BY PARENTS' TRAINING

Subjects' Preference	*Musical Training of Parents*		
	Both	*One*	*Neither*
Classical	69%	68%	64%
Semiclassical	11%	11%	13%
Popular	20%	21%	23%

Table 6 shows an interesting trend according to membership in the musical organizations of the camp. The order of organizations which results from a descending arrangement of classical preference percentages is found to be Orchestra, Garnet Band, Dance Band, Chorus, and Gold Band. This could be interpreted as indicative of several possibilities.

Because of the nature of the music performed by the Orchestra it could be expected that the members would have a wider knowledge of, and preference for, classical music. The most

TABLE 6
MUSICAL PREFERENCE PERCENTAGES BY MEMBERSHIP IN CAMP MUSICAL ORGANIZATIONS

Preference	*Camp Musical Organizations*				
	Orchestra	*Garnet Band*	*Dance Band*	*Chorus*	*Gold Band*
Classical	83%	65%	64%	57%	56%
Semiclassical	8%	16%	9%	13%	14%
Popular	9%	19%	27%	30%	30%

advanced band musicians make up the Garnet Band, and, according to the concept that training influences preference, could be expected to show a higher preference rating.

It might be considered surprising that Dance Band members would rate high on the scale of classical preference. However, all members of the Dance Band were also members of at least one other instrumental organization, and to a large extent were advanced players.

Chorus membership might be expected to contribute to higher musical preferences. However, the vocal nature of much popular music and the members' lack of the intensive training comparable to that of the instrumental musician may account for the relatively high preference for popular music by this group of subjects.

It is to be expected that members of the Gold Band would show the highest preference for popular music and the lowest choice of classical because of the fact that the Gold Band was made up of the least advanced instrumental performers in the camp.

TABLE 7
MUSICAL PREFERENCE PERCENTAGES BY LISTENING MEDIA

Music Preference	*Subjects Grouped by Listening Preference*		
	Record Player	*Television*	*Radio*
Classical	77%	64%	62%
Semiclassical	11%	11%	13%
Popular	12%	25%	25%

Table 7 shows the relationships among the preferred media for listening and musical preference. There is a very slight trend in musical preferences in relation to the grouping of subjects according to their preferred media for listening. The subjects who prefer listening to the record player show a greater preference for classical music than do those who like to listen to the television or the radio. One could possibly assume that the difference in preference is related to the subjects' choice of selecting their own music or their freedom from the choices of the disc jockeys to be heard on television or radio, but it is hardly likely that such an assumption could be proved.

The fact that the preferences of classical music for all groups except those of the eighth and ninth grades were well above 50 percent is very likely related to the fact that the subjects do comprise a select group of musically trained adolescents, and it might be assumed that preferences of classical music within the general population would fall well below the 50 percent level. The least trained groups, the eighth and ninth grade representatives of the current sample, probably resemble most closely the general population, and their preferences for classical music, falling below 50 percent may be another indication that this assumption could be true.

Table 8 shows the "top-ten" popular music preference lists of the subject group and of the local and national population norms as determined by radio and television performances and wholesale and retail record sales for the week in which the questionnaire was administered. Local and national lists were provided for the study by radio station WMEN, Tallahassee, Florida.

It is interesting to note that only four of the preferences of the subject group were to be found in the local and national lists. This fact could suggest that the members of the musically experienced group of subjects are relatively free from any pressures of

TABLE 8
"TOP-TEN" POPULAR MUSIC PREFERENCE LISTS (WEEK OF JULY 13, 1959)

Subjects' List	*Local List*	*National List*
Smoke Gets in Your Eyes	Lonely Boy	Battle of New Orleans
*Twixt Twelve and Twenty	Lipstick on Your Collar	Lonely Boy
So Fine	Along Came Jones	Lipstick on Your Collar
Quiet Village	Twixt Twelve and Twenty	Waterloo
Dream Lover	Only Sixteen	Personality
*Lonely Boy	Just Keep it Up	Tiger
*Battle of New Orleans	M. T. A.	Bobby Sox to Stockings
*Tallahassee Lassie	Tallahassee Lassie	What a Difference a Day Makes
Autumn Leaves	Melancholy Baby	There Goes My Baby
Ebb Tide	I Still Get Jealous	I Only Have Eyes for You

*These selections by the subjects appear in the local and/or national lists.

general population norms and are able to form their own preferences in the light of musical experience.

Lonely Boy is found to be first on the local list and second on the national list, which provides a reasonable expectation that it might appear also on the subjects' list. Similarly, *The Battle of New Orleans*, which is number one on the national list, could be expected to appear on the subjects' list. The very fact that the subjects were in Tallahassee could have been an important factor affecting the inclusion of *Tallahassee Lassie* in their preference list.

There is apparently no particular reason which would cause a piece as low on the local list as *Twixt Twelve and Twenty* to be more likely to appear on the subjects' list than any other number on the local or national lists. Of course, it is clear that cultural factors beyond the musical training of the subjects are influential in forming the students' preferences, and it is not surprising to find agreement with some of the norms of the general population.

Summary

A literature survey has revealed an interest in the development of musical preferences, and a general agreement among researchers holds that these preferences are culturally derived and are dependent upon a variety of factors. It has been the purpose of this study to explore some of the variables as found in a select group of musically experienced adolescents. The subjects' preferences in popular music were compared with population norms to determine to some extent the influence of their musical training upon their musical preferences.

Data for the study were obtained from an original questionnaire administered to high school music campers of the FSU Summer Music Camp, 1959. The data were tabulated and certain conclusions and observations were made.

The results of the study describe the subject group as predominantly female. Musical training averages showed an expected increase with school grade; no important difference appeared between the training of males and females. Almost one-half the subjects were found to have one parent with musical training, approximately one-fourth of the subjects had parents both having musical training, and about one-fourth had parents neither of which had had musical training. Almost all the subjects' homes had radios, television sets, and record players, but

more than one-half the subjects preferred listening to live performances rather than to any of these three mechanical media.

There appeared to be some relationship between grade level, parents' musical training, and membership in certain camp musical organizations, and the formation of musical preferences, while there seemed to be no distinct relationship between preferences and sex or preferred media for music listening. It was concluded that the preferences of the subject group may be "higher" than those of the general population primarily because of the musical training of the subjects.

Comparison of the "top-ten" preference list of the subjects with local and national lists suggests that the subject group is relatively free from the pressures of the general population norms, but that some influences beyond the musical training of the group can be expected.

The study indicates tendencies relating some factors of musical training to the formation of preferences, and it indicates a need for further, more carefully controlled studies, in which stronger conclusions can be made and in which the results can be statistically tested and validated.

Erskine College

The Teaching Load and Related Activities of Music Teachers in Indiana Public Schools, 1953-1954

JOHN K. COLBERT

Introduction

A GROWING CONCERN regarding teaching loads is being shown by administrative officers and teachers. Three of the contemporary factors which appear to contribute to this concern include (a) the continued increase in student population, (b) the expanded aims of education, and (c) the increase in extra-instructional duties and activities.[1]

It has been estimated that by 1965 the population of the United States may be expected to reach 190 million. The number of school-age children five to seventeen years of age may be expected to exceed 48 million. This represents an increase of almost one-third over the present number of school-age children. The increase in school population on the high school level is expected to be more than one-half.[2]

Accompanying the problem of an increasing student population in the schools is the enlargement of educational aims. During recent conference sessions sponsored by three education associations the following aims of education were set forth:

> The primary task of education is to turn out cultured and competent citizens of a democratic society, prepared to bear their share of the responsibilities common to all the citizens of such a society, to understand the relationship of their own activities to the world around them and to derive an abiding satisfaction from that understanding.[3]

The third factor contributing to the interest and concern regarding teacher load is the increase in the duties performed by the teacher. Assigned duties, in addition to the regular classroom teaching assignment, may include study hall, homeroom and hall monitoring, lunchroom supervision, school library work, class sponsorship, attendance at departmental and faculty meetings, keeping school records, and assisting with class scheduling.

Some of the unassigned duties and activities for which the music teacher may be responsible are the enlistment of new members for school music groups, the care and repair of instruments, the selecting and ordering of music, the cataloging of the music library, and the care and distribution of uniforms and robes. In addition, the music teacher is expected to have performing groups available for contests, festivals, and school and community programs.

"Many schools are demanding too much of their music teachers. This is perhaps more true of the smaller

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[1]This article is an abridgment of the author's Ed.D. project of the same title (Teachers College, Columbia University, 1956).

[2]National Citizens Commission for the Public Schools, *Financing Public Education in the Decade Ahead*, ed. Beardsley Ruml (New York: 1954), pp. 1-2.

[3]Benjamin Fine, "Three Conferences Examine the Condition of American Schools and Teaching," *The New York Times*, 4:11, March, 1955. (The associations represented were the American Association of Colleges for Teacher Education, the Association for Higher Education, and the American Association of Junior Colleges.)

schools than of the larger units. Standards of instruction and the welfare of the teachers engaged in the profession are jeopardized when the administration fails to comprehend fully the physical strain involved in conducting musical activities. A balanced music program to serve all children in the school will require that adequate hours be available to do the work."[4]

The project reported here attempts to collect and compare data concerning the teaching loads of music teachers in the Indiana public schools during the school year, 1953-1954.

Method and Scope

To gather data, questionnaire forms were distributed to 1,284 music teachers in Indiana. The returned questionnaires were classified according to six population groups, grade levels taught by teachers, and sex. Usable reports were received from five hundred and twenty-nine teachers, 41 percent of the total.

Table 1 presents an analysis of the number and percent of music teachers who responded according to grade levels taught.

Table 2 presents the distribution of the number and percent of responding men and women teachers according to area of work.

The results of the inquiry regarding formal preparation for teaching indicated that 334, or 63 percent, of the men and women had earned the bachelor's degree. Teachers having the master's degree accounted for 154, or 29 percent of the respondents. Twenty-eight, or 5 percent, indicated they were working for or planned to work for the doctor's degree. Only thirteen teachers, or 2 percent of the respondents, reported they were undergraduates.

TABLE 1
NUMBER AND PERCENT OF MUSIC TEACHERS RESPONDING, ACCORDING TO GRADE LEVEL TAUGHT BY MEN AND WOMEN, 1953-1954

Grade Level	*Number of Teachers*	*Percent of Teachers*
Elementary only		
Men	2	.4
Women	43	8.1
Total	45	8.5
Elementary and junior high		
Men	21	3.9
Women	71	13.5
Total	92	17.4
Elementary and senior high		
Men	16	3.0
Women	5	.9
Total	21	3.9
Junior high only		
Men	2	.4
Women	13	2.5
Total	15	2.9
Junior and senior high		
Men	37	7.0
Women	13	2.5
Total	50	9.5
Senior high only		
Men	19	3.6
Women	15	2.8
Total	34	6.4
Elementary, junior, and senior high		
Men	146	27.6
Women	126	23.8
Total	272	51.4
Total men	243	45.9
Total women	286	54.1
Total teachers	529	100.0

Classroom Teaching Assignments

The load of classroom teaching assignments may be expressed in terms of (a) the average number of periods taught per week, (b) the average num-

[4]Sadie M. Rafferty and J. J. Weigand, "The Function of Music in the Secondary-School Curriculum," *The Bulletin of the National Association of Secondary-School Principals* XXXVI (November 1952), p. 17.

TABLE 2
NUMBER AND PERCENT OF MUSIC TEACHERS RESPONDING, ACCORDING TO AREA OF WORK BY MEN AND WOMEN, 1953-1954

Area of Work	*Number of Teachers*	*Percent of Teachers*
Instrumental and vocal		
Men	127	24.0
Women	97	18.3
Total	224	42.3
Vocal only		
Men	25	4.7
Women	180	34.1
Total	205	38.8
Instrumental only		
Men	91	17.2
Women	9	1.7
Total	100	18.9
Total men	243	45.9
Total women	286	54.1
Total teachers	529	100.0

ber of pupil-periods taught per week, and (c) the average number of hours taught per week.

Number of Periods Taught Per Week.—Table 3 gives the average number of periods taught per week by men and women and the percent of men and women who were assigned the periods according to community population and grade level. The data are based on the response of 520 teachers, or 98 percent of the respondents.

The average number of periods taught per week by all music teachers was 28 periods. Men and women who taught in two of the elementary grade level classifications, elementary and elementary and junior high, reported teaching the largest average number of periods per week, 36 and 34 periods respectively. This is probably due to the shorter length of periods in elementary schools.

Men and women teaching at the junior and senior high level reported an average of 21 periods per week. For teachers in the senior high level the average number of periods taught per week was 21 periods. The average number of periods taught per week by teachers in both the junior and senior high and senior high only was 21 periods.

In the study *Teaching Load in 1950*, the average number of periods taught per week by 830 secondary school teachers was reported as 25 periods.[5] The average number of periods assigned per week to 2,206 secondary school teachers of academic and commercial subjects, as reported in "Teacher Load in Public Secondary Schools," was 24 periods.[6]

Number of Pupil-Periods Taught Per Week.—A pupil-period of classroom teaching signifies the instruction of one pupil for one school period. The pupil-period is determined by the number of pupils in classes per week multiplied by the number of periods taught per week.

Table 4 presents data concerning the average number of pupil-periods taught per week by 520 men and women teachers and the percent of men and women who were assigned the pupil-periods according to community population and grade level. The data are based on the response of 520 teachers, or 98 percent of the respondents.

The teaching load recommended by the North Central Association of Colleges and Secondary Schools is 750

[5]National Education Association, *Teaching Load in 1950* (*Research Bulletin*, February 1951), pp. 11-12.

[6]Chester George Stocker, "Teacher Load in Public Secondary Schools" (Ph.D. dissertation, University of Pennsylvania, 1940), p. 15.

TABLE 3. AVERAGE NUMBER OF PERIODS TAUGHT PER WEEK AND PERCENT OF MEN AND WOMEN MUSIC TEACHERS WHO RESPONDED, ACCORDING TO COMMUNITY POPULATION AND GRADE LEVEL TAUGHT, 1953-1954

Grade Level	Community Population											
	Under 2,500		2,500-4,999		5,000-9,999		10,000-29,999		30,000-99,999		100,000 and over	
	Periods	Percent	Periods	Percent	Periods	Percent	Periods	Percent	Periods	Percent	Periods	Percent
Elementary only												
Men	——	——	——	——	56.00	2.1	——	——	26.00	1.5	——	——
Women	29.50	.8	37.00	4.1	40.83	12.8	43.45	23.8	27.00	17.6	37.56	10.7
Both	——	——	——	——	43.00	14.9	——	——	26.92	19.1	——	——
Elementary and junior high												
Men	——	——	——	——	——	——	32.00	6.5	25.25	11.8	36.11	10.7
Women	29.91	9.8	36.33	6.1	25.86	14.9	53.00	10.9	52.50	2.9	37.30	35.7
Both	——	——	——	——	——	——	45.13	17.4	30.70	14.7	37.03	46.4
Elementary and senior high												
Men	21.73	4.7	26.50	4.1	27.00	2.1	——	——	25.50	2.9	——	——
Women	42.00	.8	28.00	2.0	——	——	31.00	2.2	45.00	1.5	——	——
Both	24.85	5.5	27.00	6.1	——	——	——	——	32.00	4.4	——	——
Junior high only												
Men	——	——	——	——	——	——	——	——	24.00	1.5	25.00	1.2
Women	——	——	——	——	——	——	23.75	8.7	24.67	4.4	25.50	2.4
Both	——	——	——	——	——	——	——	——	24.50	5.9	25.33	3.6
Junior and senior high												
Men	22.75	3.4	18.90	20.4	19.75	8.5	21.86	17.4	22.67	13.2	18.50	2.4
Women	16.00	1.3	10.00	2.0	22.50	4.3	21.00	6.5	26.29	10.3	14.00	1.2
Both	20.91	4.7	18.09	22.4	20.67	12.8	21.63	23.9	24.25	23.5	17.00	3.6
Senior high only												
Men	3.00	.4	25.00	2.0	23.00	2.1	——	——	16.80	7.4	26.73	13.1
Women	18.00	.4	——	——	——	——	10.00	2.2	22.50	8.8	19.14	8.3
Both	10.50	.8	——	——	——	——	——	——	19.91	16.2	23.87	21.4
Elementary, junior and senior high												
Men	24.87	35.0	27.00	36.7	28.24	36.2	27.38	17.4	30.80	7.4	21.67	7.1
Women	30.21	42.5	28.18	22.6	34.25	17.0	37.00	2.2	28.75	5.9	27.50	2.4
Both	27.80	77.5	27.45	59.3	30.16	53.2	28.45	19.6	29.89	13.3	23.13	9.5
Total, all teachers												
Men	24.15	43.5	24.29	63.2	27.71	51.0	25.79	41.3	24.03	45.7	27.97	34.5
Women	29.91	55.6	29.50	36.8	32.39	49.0	37.65	56.5	28.06	51.4	33.55	60.7
Both	27.39	99.1	26.20	100.0	30.00	100.0	32.64	97.8	26.17	97.1	31.53	95.2
Number of teachers responding	233		49		47		45		66		80	

TABLE 4. AVERAGE NUMBER OF PUPIL-PERIODS TAUGHT PER WEEK AND PERCENT OF MEN AND WOMEN MUSIC TEACHERS WHO RESPONDED, ACCORDING TO COMMUNITY POPULATION AND GRADE LEVEL TAUGHT, 1953-1954

Grade Level	Community Population											
	Under 2,500		2,500-4,999		5,000-9,999		10,000-29,999		30,000-99,999		100,000 and over	
	Periods	Percent	Periods	Percent	Periods	Percent	Periods	Percent	Periods	Percent	Periods	Percent
Elementary only												
Men	——	——	——	——	1,120.00	2.1	——	——	520.00	1.5	——	——
Women	590.00	.8	740.00	4.1	816.60	12.8	869.00	23.8	540.00	17.6	751.20	10.7
Both	——	——	——	——	860.00	14.9	——	——	538.40	19.1	——	——
Elementary and junior high												
Men	——	——	——	——	——	——	640.00	6.5	505.00	11.8	722.20	10.7
Women	598.20	9.8	726.60	6.1	517.20	14.9	1,060.00	10.9	1,050.00	2.9	746.00	35.7
Both	——	——	——	——	——	——	902.60	17.4	614.00	14.7	740.60	46.4
Elementary and senior high												
Men	434.60	4.7	530.00	4.1	540.00	2.1	——	——	510.00	2.9	——	——
Women	840.00	.8	560.00	2.0	——	——	620.00	2.2	900.00	1.5	——	——
Both	497.00	5.5	540.00	6.1	——	——	——	——	640.00	4.4	——	——
Junior high only												
Men	——	——	——	——	——	——	——	——	480.00	1.5	500.00	1.2
Women	——	——	——	——	——	——	475.00	8.7	493.40	4.4	510.00	2.4
Both	——	——	——	——	——	——	——	——	490.00	5.9	506.60	3.6
Junior and senior high												
Men	455.00	3.4	378.00	20.4	395.00	8.5	437.20	17.4	453.40	13.2	370.00	2.4
Women	320.00	1.3	200.00	2.0	450.00	4.3	420.00	6.5	525.80	10.3	280.00	1.2
Both	418.20	4.7	361.80	22.4	413.40	12.8	432.60	23.9	485.00	23.5	340.00	3.6
Senior high only												
Men	60.00	.4	500.00	2.0	460.00	2.1	——	——	336.00	7.4	534.60	13.1
Women	360.00	.4	——	——	——	——	200.00	2.2	450.00	8.8	382.80	8.3
Both	210.00	.8	——	——	——	——	——	——	398.20	16.2	477.40	21.4
Elementary, junior and senior high												
Men	497.40	35.0	540.00	36.7	564.80	36.2	547.60	17.4	616.00	7.4	433.40	7.1
Women	604.20	42.5	563.60	22.6	685.00	17.0	740.00	2.2	575.00	5.9	550.00	2.4
Both	556.00	77.5	549.00	59.3	603.20	53.2	569.00	19.6	597.80	13.3	462.60	9.5
Total, all teachers												
Men	482.90	43.5	485.80	63.2	554.20	51.0	515.80	41.3	480.60	45.7	559.40	34.5
Women	598.20	55.6	590.00	36.8	647.80	49.0	753.00	56.5	561.20	51.4	671.00	60.7
Both	547.80	99.1	524.00	100.0	600.00	100.0	652.80	97.8	523.40	97.1	630.60	95.2
Number of teachers responding	233		49		47		45		66		80	

Number of teachers responding	233		49		47		45		66		80	

TABLE 4. AVERAGE NUMBER OF PUPIL-PERIODS TAUGHT PER WEEK AND PERCENT OF MEN AND WOMEN MUSIC TEACHERS WHO RESPONDED, ACCORDING TO COMMUNITY POPULATION AND GRADE LEVEL TAUGHT, 1953-1954

	Community Population											
	Under 2,500		*2,500-4,999*		*5,000-9,999*		*10,000-29,999*		*30,000-99,999*		*100,000 and over*	
Grade Level	*Pupil-periods*	*Percent*	*Pupil-periods*	*Percent*	*Pupil-periods*	*Percent*	*Pupil-periods*	*Percent*	*Pupil-periods*	*Percent*	*Pupil-periods*	*Percent*
Elementary only												
Men	——	——	——	——	1960.00	2.1	——	——	1730.00	1.5	——	——
Women	949.00	.8	1411.00	4.1	1653.17	12.8	1821.40	23.8	854.83	17.6	1480.01	10.7
Both	——	——	——	——	1697.00	14.9	——	——	922.15	19.1	——	——
Elementary and junior high												
Men	——	——	——	——	——	——	1158.33	6.5	572.25	11.8	732.33	10.7
Women	998.26	9.8	1245.33	6.1	911.14	14.9	1622.20	10.9	1530.00	2.9	1285.60	35.7
Both	——	——	——	——	——	——	1448.25	17.4	763.80	14.7	1157.92	46.4
Elementary and senior high												
Men	563.09	4.7	805.00	4.1	942.00	2.1	——	——	1060.50	2.9	——	——
Women	875.00	.8	1312.00	2.0	——	——	1759.00	2.2	1200.00	1.5	——	——
Both	611.08	5.5	974.00	6.1	——	——	——	——	1107.00	4.4	——	——
Junior high only												
Men	——	——	——	——	——	——	——	——	726.00	1.5	905.00	1.2
Women	——	——	——	——	——	——	1027.00	8.7	884.33	4.4	852.50	2.4
Both	——	——	——	——	——	——	——	——	844.75	5.9	870.00	3.6
Junior and senior high												
Men	470.13	3.4	729.10	20.4	952.25	8.5	830.88	17.4	982.67	13.2	937.50	2.4
Women	371.00	1.3	384.00	2.0	807.50	4.3	754.33	6.5	788.00	10.3	630.00	1.2
Both	443.09	4.7	697.73	22.4	904.00	12.8	810.00	23.9	897.50	23.5	835.00	3.6
Senior high only												
Men	111.00	.4	685.00	2.0	515.00	2.1	——	——	844.20	7.4	777.55	13.1
Women	727.00	.4	——	——	——	——	375.00	2.2	1140.33	8.8	709.71	8.3
Both	419.00	.8	——	——	——	——	——	——	1005.76	16.2	751.17	21.4
Elementary, junior, and senior high												
Men	771.96	35.0	767.50	36.7	782.76	36.2	1002.89	17.4	735.60	7.4	689.60	7.1
Women	897.25	42.5	1448.55	22.6	1306.13	17.0	1545.00	2.2	873.75	5.9	692.50	2.4
Both	840.80	77.5	1025.83	59.3	950.24	53.2	1057.10	19.6	797.00	13.3	690.43	9.5
Total, all teachers												
Men	719.28	43.5	754.87	63.2	855.54	51.0	957.40	41.3	835.42	45.7	763.28	34.5
Women	1181.73	55.6	1343.78	36.8	1233.09	49.0	1455.00	56.5	943.54	51.4	1181.94	60.7
Both	797.28	99.1	971.20	100.0	1040.30	100.0	1238.29	97.8	892.76	97.1	1031.65	95.2
Number of teachers responding	233		49		47		45		66		80	

pupil-periods per week.[7] The average number of pupil-periods assigned 2,206 teachers of academic and commercial subjects as reported in "Teacher Load in Public Secondary Schools" was 683.57 pupil-periods.[8] In the present study it was found that men and women music teachers working in the senior high grade level were assigned an average of 794 pupil-periods per week. Teachers working in the junior high and senior high grade levels taught an average of 754 pupil-periods per week. The average number of pupil-periods for teachers in the secondary schools—junior and senior high, and senior high grade levels, was 769 pupil-periods. The range of the average number of pupil-periods taught per week by all teachers was from 754 pupil-periods for men and women in the junior and senior high grade level to 1,396 pupil-periods for men and women teachers in the elementary level only. The average number of pupil-periods taught per week by all music teachers was 932.

These findings indicate that music teachers were teaching a larger number of pupil-periods per week than recommended by the North Central Association of Colleges and Secondary Schools[9] and more than the academic and commercial teachers reported in the study "Teacher Load in Public Secondary Schools."[10]

Number of Hours and Minutes Taught per Week.—The teaching load of the conscientious teacher cannot be measured solely by the number of hours and minutes he teaches per week. To afford, however, a more complete analysis of the work week it is necessary to consider the average number of hours and minutes taught per week.

Table 5 presents data concerning the average number of hours and minutes taught per week by men and women teachers and the percent of men and women who taught the number of hours and minutes according to community population and grade level. The data are based on the response of 520 teachers, or 98 percent of the respondents.

The average number of hours and minutes taught per week by all music teachers was eighteen hours and two minutes. Men and women who taught all grade levels, elementary, junior high, and senior high, accounted for 50 percent of the responding teachers. These teachers reported an average of eighteen hours and twenty minutes of classroom teaching per week. Generally speaking, teachers in the two community population groups, 5,000-9,999 and 10,000-29,999, taught more hours than did teachers in the other community population groups.

Assigned Duties Other Than Classroom Teaching

Table 6 shows the average number of hours and minutes devoted weekly to assigned duties other than classroom teaching and the number of men and women teachers who responded according to community population. Four hundred eighty-three, or 91 percent of the responding teachers reported assigned duties other than classroom teaching.

Unassigned Duties

In addition to the assigned duties of the music teacher there are certain unassigned duties as well as other conditions present in the teaching process

TABLE 5. AVERAGE NUMBER OF HOURS AND MINUTES OF CLASSROOM TEACHING PER WEEK AND PERCENT OF MEN AND WOMEN MUSIC TEACHERS WHO RESPONDED, ACCORDING TO COMMUNITY POPULATION AND GRADE LEVEL TAUGHT, 1953-1954

[7]North Central Association of Colleges and Secondary Schools, "Policies, Regulations, and Criteria for the Approval of Secondary Schools," *North Central Association Quarterly*, XXIX (July 1954), 124-37.

[8]Stocker, p. 19.

[9]North Central Association, *op. cit.*

[10]Stocker, p. 19.

TABLE 5. AVERAGE NUMBER OF HOURS AND MINUTES OF CLASSROOM TEACHING PER WEEK AND PERCENT OF MEN AND WOMEN MUSIC TEACHERS WHO RESPONDED, ACCORDING TO COMMUNITY POPULATION AND GRADE LEVEL TAUGHT, 1953-1954

	Community Population											
	Under 2,500		*2,500-4,999*		*5,000-9,999*		*10,000-29,999*		*30,000-99,999*		*100,000 and over*	
Grade Level	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*
Elementary only												
Men	—	—	—	—	32:10	2.1	—	—	19:30	1.5	—	—
Women	13:07	.8	16:07	4.1	17:10	12.8	20:03	23.8	13:56	17.6	19:49	10.7
Both	—	—	—	—	19:22	14.9	—	—	14:22	19.1	—	—
Elementary and junior high												
Men	—	—	—	—	—	—	19:43	6.5	18:36	11.8	21:50	10.7
Women	14:49	9.8	18:28	6.1	14:13	14.9	25:21	10.9	23:02	2.9	21:32	35.7
Both	—	—	—	—	—	—	23:14	17.4	19:29	14.7	21:36	46.4
Elementary and senior high												
Men	15:19	4.7	16:15	4.1	18:25	2.1	—	—	19:18	2.9	—	—
Women	23:75	.8	17:30	2.0	—	—	15:45	2.2	20:50	1.5	—	—
Both	16:36	5.5	16:40	6.1	—	—	—	—	19:49	4.4	—	—
Junior high only												
Men	—	—	—	—	—	—	—	—	19:12	1.5	16:40	1.2
Women	—	—	—	—	—	—	20:09	8.7	19:47	4.4	21:13	2.4
Both	—	—	—	—	—	—	—	—	19:38	5.9	19:42	3.6
Junior and senior high												
Men	16:59	3.4	16:05	20.4	16:45	8.5	18:52	17.4	19:52	13.2	15:55	2.4
Women	16:03	1.3	7:05	2.0	21:13	4.3	16:26	6.5	22:20	10.3	11:40	1.2
Both	16:48	4.7	15:16	22.4	18:14	12.8	18:12	23.9	20:57	23.5	14:30	3.6
Senior high only												
Men	2:30	.4	21:15	2.0	16:30	2.1	—	—	15:05	7.4	9:06	13.1
Women	13:20	.4	—	—	—	—	9:10	2.2	19:23	8.8	13:56	8.3
Both	7:55	.8	—	—	—	—	—	—	17:26	16.2	10:59	21.4
Elementary, junior, and senior high												
Men	16:13	35.0	18:22	36.7	24:24	36.2	22:08	17.4	18:06	7.4	17:00	7.1
Women	18:52	42.5	16:06	22.6	18:35	17.0	25:10	2.2	19:06	5.9	20:52	2.4
Both	17:40	77.5	17:30	59.3	22:32	53.2	22:26	19.6	18:33	13.3	17:58	9.5
Total, all teachers												
Men	16:03	43.5	17:35	63.2	22:52	51.0	20:28	41.3	18:25	45.7	15:25	34.5
Women	18:05	55.5	19:37	36.8	17:07	49.0	20:17	56.5	18:22	51.4	19:58	60.7
Both	17:11	99.0	18:07	100.0	20:03	100.0	20:22	97.8	18:23	97.1	18:19	95.2
Number of teachers responding	233		49		47		45		66		80	

TABLE 6. AVERAGE NUMBER OF HOURS AND MINUTES DEVOTED WEEKLY AS REPORTED BY 483 MEN AND WOMEN MUSIC TEACHERS ACCORDING

	Community Population											
	Under 2,500				2,500-4,999				5,000-9,999			10,000
Assigned Duty	M*	N**	W*	N**	M	N	W	N	M	N	W	M N
Hall monitoring	7:56	37	1:31	27	:36	10	:57	6	:53	3	:45	2:31
Study hall	4:33	46	3:59	40	3:24	8	3:35	4	4:22	2	——	2:45
School library	1:45	4	2:51	8	——	—	——	—	——	—	——	—— —
Home room	1:14	9	1:42	5	:22	3	——	—	:45	1	1:00	1:29
Class sponsorship	1:07	42	1:04	50	:18	7	:27	4	1:55	3	:20	:51
School records	:36	38	1:04	37	:41	14	:32	5	:43	11	1:33	:52
Others	——	—	1:08	9	——	—	:05	1	——	—	:58	—— —
Lunch supervision	1:13	11	:53	24	:38	13	:19	4	:21	4	:58	—— —
Departmental meetings	:33	12	:45	16	:19	6	:15	1	:30	3	:23	:23
Faculty meetings	:30	75	:23	90	:24	24	:29	12	:28	21	:23	:28 1
Class scheduling	:35	17	:14	18	:18	14	:39	2	:19	7	:12	:05
Total	6:52	96	2:12	116	2:14	30	1:27	16	1:47	23	1:52	2:05 1
All duties, men and women	4:20				1:58				1:49			

*M indicates men teachers, W indicates women teachers. **N indicates the number of men women te

which tend to contribute to the teacher's total teaching load.

Class Preparation.—Table 7 presents the analysis of the average number of hours per week, during and after school hours, men and women teachers devoted to class preparation and the percent of men and women who reported according to community population and grade level. The data for this inquiry are based on the response of 463 teachers, or 88 percent of the respondents.

It was found that the average amount of time all music teachers devoted to class preparation was six hours and forty-nine minutes per week.

Travel Time to Fulfill Teaching Assignments.—Table 8 shows the average number of hours and minutes per week men and women teachers devoted to travel from school to school or town to town to fulfill teaching assignments and the percent of men and women responding according to community population. The amount of travel time required to fulfill teaching assignments was reported by 179 men and women teachers, or 34 percent of the respondents. The average number of hours per week devoted by all teachers for travel from school to school or town to town was one hour and fifty minutes.

Teaching Individual Lessons. — Table 9 presents the average number of hours men and women devoted per week teaching individual lessons during and after school and the percent of men and women who reported according to community population. The data are based on the response of 323 men and women teachers, or 61 percent of the respondents. For all teachers the average number of hours per week devoted to teaching individual lessons both during and after school hours was nine hours and ten minutes.

Additional Unassigned Duties. — Music teachers were requested to report the number of hours per week spent performing specific additional unassigned duties. They were also

EVOTEEKLY TO ASSIGNED DUTIES OTHER THAN CLASSROOM TEACHING,
ACHERCCORDING TO COMMUNITY POPULATION, 1953-1954

mmu-Population												Average Hours and Minutes All Teachers
999	10,000-29,999				30,000-99,999				100,000 and Over			
W	M	N	W	N	M	N	W	N	M	N	W	N	
:45	2:31	2	2:34	4	:27	4	:55	12	3:07	6	1:31	19	3:12
—	2:45	2	3:08	3	4:18	3	4:28	3	3:24	4	1:35	5	2:46
—	—	—	—	—	1:00	1	:30	1	—	—	3:57	3	2:32
1:00	1:29	6	2:05	1	1:55	12	1:06	4	1:29	9	1:47	18	1:31
:20	:51	2	:21	2	:19	3	2:00	1	:43	3	1:54	6	1:02
1:33	:52	9	1:05	12	:48	14	:59	15	1:23	16	1:35	24	1:00
:58	—	—	1:00	1	—	—	—	—	:40	1	:51	5	:57
:58	—	—	3:04	2	:12	3	:28	4	2:02	4	:58	15	:54
:23	:23	7	:23	9	:20	19	:28	19	:39	19	:33	31	:30
:23	:28	12	:27	14	:24	25	:35	31	:28	24	:47	43	:29
:12	:05	2	:44	3	:09	7	:17	5	:17	10	:09	6	:20
1:52	2:05	18	2:43	20	1:58	30	2:15	34	3:30	30	3:51	52	—
	2:25				2:07				3:42				3:22

men women teachers.

asked to indicate the amount of time devoted weekly to any other unassigned duties which they performed.

Table 10 reveals data concerning the average number of hours music teachers devoted weekly to additional unassigned duties and the number of men and women who reported the duty according to community population. The data are based on the response of 432 teachers, or 82 percent of the respondents.

The duties are listed in rank order of the average number of hours all teachers devoted weekly to them. The "other additional unassigned duties" included preparing skits for programs, distributing phonograph records and equipment, junior high choir rehearsals, madrigal rehearsals, sponsoring junior high school functions, acting chairman of field trip committee, ensemble practice after school hours, extra rehearsals of school music groups for performances, supervision of students who take care of the school library, junior high orchestra rehearsals, completing requisitions, completing budget requests and inventories, parent-teacher association band rehearsals, mothers' chorus, chaperoning trips, sponsorship of the cheer leaders, curriculum planning, distribution of instruments, repairing music, sponsor of music club, writing program notes and articles for newspapers, and curriculum committee meetings. The average number of hours per week devoted to all additional unassigned duties by all teachers was three hours and fifteen minutes.

Special Conditions Affecting the Teaching Load

In addition to the extra-instructional assigned and unassigned duties certain special conditions which tend to affect the teacher's load were investigated. The belief that the condition of the physical plant may seem to affect the teaching load was expressed in the study *Teaching Load in 1950.*

"Some teachers who carry only a normal assignment of teaching and

TABLE 7. AVERAGE NUMBER OF HOURS PER WEEK DEVOTED TO CLASS PREPARATION DURING AND AFTER SCHOOL HOURS AND PERCENT OF MEN AND WOMEN MUSIC TEACHERS WHO RESPONDED, ACCORDING TO COMMUNITY POPULATION AND GRADE LEVEL, 1953-1954

	Community Population											
	Under 2,500		*2,500-4,999*		*5,000-9,999*		*10,000-29,999*		*30,000-99,999*		*100,000 and Over*	
Grade Level	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*
Elementary only												
Men	——	——	——	——	10:00	2.1	——	——	3:00	1.5	——	——
Women	11:15	.4	2:05	4.2	6:06	10.6	6:47	13.0	3:16	13.2	9:09	5.9
Both	——	——	——	——	6:45	12.7	——	——	3:14	14.7	——	——
Elementary and junior high												
Men	——	——	——	——	——	——	3:07	4.4	5:57	10.4	6:37	9.5
Women	6:47	9.4	7:00	2.0	9:56	12.8	6:28	6.5	3:45	1.5	6:32	30.9
Both	——	——	——	——	——	——	5:08	10.9	5:40	11.9	6:33	40.4
Elementary and senior high												
Men	5:11	3.9	3:31	4.1	8:30	2.1	——	——	9:05	2.9	——	——
Women	15:22	.9	9:00	2.0	——	——	2:36	2.2	12:30	1.5	——	——
Both	7:02	4.8	5:21	6.1	——	——	——	——	10:13	4.4	——	——
Junior high only												
Men	——	——	——	——	——	——	——	——	6:00	1.5	8:20	1.2
Women	——	——	——	——	——	——	5:50	6.5	5:37	4.4	1:45	2.4
Both	——	——	——	——	——	——	——	——	5:43	5.9	3:57	3.6
Junior and senior high												
Men	3:30	3.0	10:14	18.4	9:00	6.4	6:00	15.2	5:39	13.2	7:05	1.2
Women	11:37	.8	1:20	2.0	9:05	4.3	11:12	6.5	5:30	7.4	9:00	1.2
Both	5:18	3.8	9:21	20.4	9:02	10.7	7:34	21.7	5:36	20.6	8:02	2.4
Senior high only												
Men	:45	.4	2:30	2.0	4:35	2.1	——	——	5:03	7.3	6:16	11.9
Women	5:10	.4	——	——	——	——	5:00	2.2	8:48	7.3	6:57	4.8
Both	2:57	.8	——	——	——	——	——	——	6:55	14.6	6:28	16.7
Elementary, junior, and senior high												
Men	5:47	33.2	5:05	36.7	7:47	34.1	7:52	15.2	5:30	7.3	8:25	4.8
Women	8:08	42.1	7:50	18.4	7:20	14.9	——	——	4:49	5.9	6:30	2.4
Both	7:06	75.3	6:00	55.1	7:37	49.0	——	——	5:12	13.2	7:47	7.2
Total, all teachers												
Men	5:31	40.5	6:26	61.2	7:55	46.8	6:28	34.8	5:45	44.1	6:52	28.6
Women	8:04	54.0	6:34	28.6	7:59	42.6	6:59	36.9	5:49	44.2	6:42	47.6
Both	6:59	94.5	6:29	89.8	7:57	89.4	6:44	71.7	5:47	85.3	6:46	76.2
Number of teachers responding	232		44		47		13		65		25	

TABLE 8. AVERAGE NUMBER OF HOURS AND MINUTES PER WEEK DEVOTED TO TRAVEL FROM SCHOOL TO SCHOOL OR TOWN TO TOWN TO FULFILL TEACHING ASSIGNMENTS AND PERCENT OF MEN AND WOMEN MUSIC TEACHERS WHO RESPONDED, ACCORDING TO COMMUNITY POPULATION, 1953-1954

TABLE 8. AVERAGE NUMBER OF HOURS AND MINUTES PER WEEK DEVOTED TO TRAVEL FROM SCHOOL TO SCHOOL OR TOWN TO TOWN TO FULFILL TEACHING ASSIGNMENTS AND PERCENT OF MEN AND WOMEN MUSIC TEACHERS WHO RESPONDED, ACCORDING TO COMMUNITY POPULATION, 1953-1954

	Community Population											
	Under 2,500		*2,500-4,999*		*5,000-9,999*		*10,000-29,999*		*30,000-99,999*		*100,000 and Over*	
Teachers	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*
Men	2:06	14.5	1:07	30.6	1:28	27.6	1:26	23.9	2:13	26.5	2:01	11.9
Women	1:52	13.6	2:05	6.1	1:27	29.8	1:44	32.6	2:15	8.8	2:29	9.5
Both	1:59	28.1	1:17	36.7	1:27	57.4	1:36	56.5	2:13	35.3	2:13	21.4
Percent not responding	____	71.9	____	63.3	____	42.6	____	43.5	____	64.7	____	78.6
Number of teachers responding	66		18		27		26		24		18	

TABLE 9. AVERAGE NUMBER OF HOURS AND MINUTES PER WEEK DEVOTED TO TEACHING INDIVIDUAL LESSONS AND PERCENT OF MEN AND WOMEN MUSIC TEACHERS WHO RESPONDED, ACCORDING TO COMMUNITY POPULATION, 1953-1954

	Community Population											
	Under 2,500		*2,500-4,999*		*5,000-9,999*		*10,000-29,999*		*30,000-99,999*		*100,000 and Over*	
Individual Lessons	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*	*Hours and Minutes*	*Percent*
During school hours												
Men	9:02	28.1	8:58	34.7	7:26	14.9	7:50	13.0	11:32	13.2	10:00	1.2
Women	7:06	21.3	7:50	8.2	5:00	6.4	3:20	2.2	7:11	5.9	19:00	3.6
Both	8:12	49.4	8:45	42.9	6:42	21.3	7:11	15.2	10:12	19.1	16:45	4.8
After school hours												
Men	7:02	31.5	5:17	38.8	4:17	25.5	9:03	26.1	7:58	29.4	6:20	19.0
Women	4:48	25.5	3:14	14.3	3:04	14.9	2:06	13.0	7:00	13.2	5:09	15.5
Both	6:02	57.0	4:44	53.1	3:50	40.4	6:44	39.1	7:40	42.6	5:48	34.5
During and after school hours												
Men	11:45	40.4	10:07	51.0	6:32	31.9	11:48	28.3	11:27	33.8	6:33	20.2
Women	7:45	35.3	6:34	16.3	3:39	21.3	2:16	15.2	8:20	16.2	7:45	19.0
Both	9:53	75.7	9:16	67.3	5:23	53.2	8:28	43.5	10:27	50.0	7:08	39.2
Percent not responding	____	24.3	____	32.7	____	46.8	____	56.5	____	50.0	____	60.8
Number of teachers responding	178		33		25		20		34		33	

TABLE 10

AVERAGE NUMBER OF HOURS AND MINUTES DEVOTED WEEKLY TO ADDITIONAL UNASSIGNED DUTIES AND NUMBER OF MEN AND WOMEN MUSIC TEACHERS WHO RESPONDED, ACCORDING TO COMMUNITY POPULATION, 1953-1954

	Community Population																							
	Under 2,500				*2,500-4,999*				*5,000-9,999*				*10,000-29,999*				*30,000-99,999*				*100,000 and Over*			
Unassigned Duty	*M**	*N***	*W**	*N**	*M*	*N*	*W*	*N*	*M*	*N*	*W*	*N*	*M*	*N*	*W*	*N*	*M*	*N*	*W*	*N*	*M*	*N*	*W*	*N*
Student counseling	1:00	4	1:23	15	1:16	4	:30	1	1:40	4	2:22	2	5:45	3	1:15	2	:38	3	1:54	4	1:54	9	1:28	6
Others	1:00	4	1:24	18	1:15	3	:47	13	____	__	2:18	6	1:19	9	:56	7	2:13	7	3:06	9	1:57	6	1:55	15
Instrument care and repair	1:14	79	1:00	42	1:25	26	1:00	2	1:48	19	1:05	3	:59	16	1:08	3	1:22	16	:48	6	1:35	21	1:19	8
Selecting and ordering music	:55	86	:49	87	:45	30	:44	13	1:13	22	:53	17	:42	17	:44	17	:36	22	1:06	21	:40	26	1:16	31
School correspondence	1:00	21	:57	28	:50	7	:13	2	:52	13	:59	8	:44	10	:50	6	:39	8	1:17	3	:43	13	:54	8
Music library cataloging	:45	65	:38	59	:34	25	:20	8	:46	17	1:28	12	:48	12	:45	11	:39	13	:43	13	:41	23	:41	18
Enlistment of new members	:39	51	:37	26	:40	19	:05	1	:22	10	:22	5	:21	12	:37	3	:38	11	:18	6	:34	12	:30	10
Uniform and robe care	:33	46	:30	39	:26	24	___	__	:23	17	:17	8	:42	12	:24	4	:39	14	:44	17	:33	18	:25	15
Total	3:21	93	2:40	97	3:37	31	:50	13	4:27	23	3:30	19	4:48	18	2:11	19	3:09	26	3:29	26	4:10	29	3.06	38
Hours and minutes, men and women	3:00				2:48				4:01				3:27				3:19				3.34			
Number of teachers responding	190				44				42				37				52				67			

*M indicates men teachers, W indicates women teachers.

**N indicates the number of men or women teachers.

TABLE 11

PERCENT OF MUSIC TEACHERS REPORTING ADEQUATE, MODERATELY ADEQUATE, OR INADEQUATE PHYSICAL PLANT AND EQUIPMENT, ACCORDING TO COMMUNITY POPULATION, 1953-1954

	Community Population																	
	Under 2,500			*2,500-4,999*			*5,000-9,999*			*10,000-29,999*			*30,000-99,999*			*100,000 and Over*		
	A[1]	*MA*[2]	*I*[3]	*A*	*MA*	*I*	*A*	*MA*	*I*	*A*	*MA*	*I*	*A*	*MA*	*I*	*A*	*MA*	*I*
Classroom size	30.6%	31.9%	37.5%	35.0%	32.3%	32.7%	44.6%	27.7%	27.7%	32.6%	43.5%	23.9%	53.8%	26.2%	20.0%	37.3%	38.6%	24.1%
Classroom acoustics	12.2	31.0	56.8	20.4	34.6	45.0	29.5	34.1	36.4	20.7	43.5	35.8	33.8	32.3	33.9	21.2	35.0	43.8
Music storage	22.8	33.0	44.2	24.5	38.8	36.7	37.2	25.6	37.2	28.3	43.5	28.2	28.5	41.3	30.2	27.3	28.6	44.1
Instrument storage	22.8	25.1	52.1	17.9	32.1	50.0	31.0	24.1	44.9	37.5	37.5	25.0	27.8	25.0	47.2	26.8	26.8	46.4
Uniform and robe storage	26.0	26.5	47.5	22.2	25.0	52.8	25.0	28.1	46.9	36.7	40.0	23.3	41.5	43.9	14.6	33.3	33.3	33.4
School owned instruments	14.5	46.0	39.5	29.4	47.1	23.5	40.0	33.3	26.7	26.0	34.8	39.2	50.0	29.4	20.6	18.2	54.5	27.3
Accessibility of music instruments and supplies	28.9	44.1	27.0	36.7	30.6	32.7	36.6	46.3	17.1	40.5	35.1	24.4	44.6	30.4	25.0	32.4	41.9	25.7
Number of teachers responding	235			49			47			46			68			84		

[1]A indicates adequate. [2]MA indicates moderately adequate. [3]I indicates inadequate.

extra-curricular duties feel the pressure of a heavy load because of physical conditions such as overcrowded or noisy buildings or lack of equipment."[11]

Physical Plant and Equipment. — Table 11 shows the percent of teachers according to community population who reported their present physical plant and equipment as adequate, moderately adequate, or inadequate. The data are based on the response of 529 teachers, or 100 percent of the respondents.

Three inadequate aspects reported by teachers in the six population groups were classroom acoustics, music storage, and instrument storage. Teachers in the 2,500-and-under population group appeared to be less satisfied with the physical plants of their schools and the general condition of their facilities than were teachers in the other population groups. Teachers in the 30,000-99,999 group appeared to be the most satisfied with their general teaching conditions.

Classroom Conflicts. — Classroom conflicts refer to the use of the music teacher's classroom by other classes while the music class is in progress. Perhaps the most common classroom conflict with which music teachers must contend is sharing the gymnasium with a scheduled section of the physical education classes. Observation and experience both have called attention to the unfavorable teaching conditions resulting from classroom conflicts.

Table 12 shows the percent of teachers according to community population who reported classroom conflicts as occurring never, seldom, sometimes, or often. The data are based on the response of 516 teachers, or 98 percent of the respondents. A decline in the percent of teachers who reported classroom conflicts may be seen from the two smallest to the four largest population groups.

Performances by School Music Groups

Educators have expressed concern over the amount of time devoted to the preparation of school music groups for numerous performances aimed primarily for public entertainment. This concern is justifiable. Time spent in the preparation for these performances often reduces class time that otherwise could be devoted to a balanced program of music study. If some of the

[11] *Teaching Load in 1950*, p. 4.

TABLE 12
PERCENT OF MUSIC TEACHERS REPORTING CLASSROOM CONFLICTS AS OCCURRING NEVER, SELDOM, SOMETIMES, OR OFTEN, ACCORDING TO COMMUNITY POPULATION, 1953-1954

Frequency of Classroom Conflict	*Community Population*					
	Under 2,500	*2,500-4,999*	*5,000-9,999*	*10,000-29,999*	*30,000-99,999*	*100,000 and Over*
Never	55.5%	61.3%	57.4%	58.6%	69.1%	64.3%
Seldom	17.0	16.3	17.0	17.4	14.7	19.0
Sometimes	13.1	6.1	12.8	8.7	8.8	9.5
Often	14.4	16.3	8.5	2.3	4.5	3.6
Percent responding	100.0	100.0	95.7	87.0	97.1	96.4
Percent not responding	—	—	4.3	13.0	2.9	3.6
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of teachers responding	235	49	45	40	66	81

recognized aims of education are to be satisfied, school music group performances must be well organized and regulated. This concept has been emphasized by Bachman:

> No band should be required to make more public appearances than it can be properly prepared for without the serious interruption of an orderly and progressively arranged course of study. . . . But with adequate administrative cooperation and skillful planning and teaching, the preparation for all public appearances, outdoor as well as indoor, can be so carefully integrated with the regular classroom or rehearsal routine as to become an important and stimulating source of learning rather than an unwarranted interruption.[12]

Concert Performances. — Table 13 shows the percent of teachers who directed or coached concert performances, and the average number of performances per teacher according to the type of school music group and community population. The data are based on the replies of 457 men and women music teachers, or 87 percent of the respondents. The average number of concert performances directed or coached by men and women music teachers was 17 per teacher.

Miscellaneous Performances. — The percent of music teachers who directed or coached miscellaneous school music performances and the average number of these performances per teacher according to the type of performance and community population is presented in Table 14. The data are based on the replies of 480 men and women music teachers, or 91 percent of the respondents.

In Table 14 the types of performances by school music groups are listed in their rank order of frequency. Miscellaneous performances other than those specifically named in the questionnaire included parades, pep rallies, Christmas, Easter, Thanksgiving, baccalaureate, commencement and other seasonal programs, class plays, recital appearances, and directing groups to entertain shut-ins at home and in hospitals. The average number of miscellaneous performances directed or coached per teacher for the school year was 12.

Contest Performances.—The percent of teachers who directed or coached contest performances according to type of contest entry and community population is shown in Table 15. The data are based on the response of 301 music teachers, or 57 percent of the respondents.

According to community population it appears that the percent of teachers in the three smallest community population groups who directed or coached contest performances was larger than the percent of teachers in the three largest community population groups. Men seemed to prepare for more instrumental contests than women while the percent of men and women who directed or coached vocal contest performances seemed to be about equal.

Performance Preparation.—Teachers indicated the average number of hours they devoted per week outside of school hours for performance preparation with reference to all of the school music performances which they directed or coached. In replying to this inquiry the teachers were asked to consider routine functions such as score studying, extra rehearsals, music arranging, and planning for the marching band.

Table 16 shows the average number of hours devoted weekly outside of school hours by music teachers for performance preparation and the per-

[12]Harold B. Bachman, "Education and Entertainment," *The Instrumentalist*, X (September 1955), 13.

TABLE 13

PERCENT OF MEN AND WOMEN MUSIC TEACHERS COMBINED WHO DIRECTED OR COACHED CONCERT PERFORMANCES AND THE AVERAGE NUMBER OF PERFORMANCES PER TEACHER, ACCORDING TO TYPE OF SCHOOL MUSIC GROUP AND COMMUNITY POPULATION, 1953-1954

Type of School Music Group	Community Population												Total Number of Performances for All Teachers
	Under 2,500		2,500-4,999		5,000-9,999		10,000-29,999		30,000-99,999		100,000 and Over		
	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	
Chorus	75.8	4.5	55.6	4.6	65.8	6.6	50.0	9.9	50.0	9.7	69.0	11.4	2018
Band	70.5	6.5	62.2	6.9	57.9	6.9	55.0	8.4	42.9	6.9	38.0	9.5	1897
Vocal ensemble	44.4	6.8	37.8	8.6	47.4	13.0	30.0	21.6	39.3	11.3	33.8	15.6	1887
Brass ensemble	30.0	3.4	33.3	4.8	34.2	5.0	20.0	13.6	23.2	3.9	18.3	3.8	559
Woodwind ensemble	29.5	3.5	24.4	4.9	34.2	5.0	17.5	10.1	17.9	5.2	16.9	5.0	514
Other	4.3	5.1	4.4	5.0	10.5	3.8	20.0	11.0	23.2	8.0	17.8	4.4	270
Orchestra	4.3	2.9	17.8	2.0	10.5	3.3	15.0	1.7	26.8	4.2	23.9	7.1	248
String ensemble	—	—	—	—	—	—	—	—	8.9	6.6	10.0	6.7	80
Percussion ensemble	3.9	3.8	8.9	1.8	5.3	1.5	5.0	3.5	3.6	3.5	7.0	2.0	64
All performances, all teachers	88.1	13.6	91.8	13.7	80.9	18.8	87.0	23.1	82.4	17.4	84.5	21.2	7537
Percent of teachers not responding	11.9	—	8.2	—	19.1	—	13.0	—	17.6	—	15.5	—	—
Total percent	100.0	—	100.0	—	100.0	—	100.0	—	100.0	—	100.0	—	—

TABLE 14

PERCENT OF MEN AND WOMEN MUSIC TEACHERS COMBINED WHO DIRECTED OR COACHED MISCELLANEOUS PERFORMANCES BY SCHOOL MUSIC GROUPS AND THE AVERAGE NUMBER OF PERFORMANCES PER TEACHER, ACCORDING TO TYPE OF PERFORMANCE AND COMMUNITY POPULATION, 1953-1954

Type of Performance by School Music Group	*Community Population*												*Total Number of Performances for All Teachers*
	Under 2,500		*2,500-4,999*		*5,000-9,999*		*10,000-29,999*		*30,000-99,999*		*100,000 and Over*		
	Percent	*Number*	*Percent*	*Number*	*Percent*	*Number*	*Percent*	*Number*	*Percent*	*Number*	*Percent*	*Number*	
Basketball game	63.4	8.4	59.6	9.1	51.2	10.7	34.9	9.1	27.9	7.6	16.7	5.9	1971
School assembly	41.7	5.1	44.7	3.9	58.5	7.1	53.5	5.0	49.2	4.8	52.8	6.2	1208
Football game	6.0	4.1	38.3	4.8	40.4	5.6	30.2	5.3	23.0	5.2	11.1	6.6	433
Radio and T.V.	11.1	1.8	12.8	3.2	19.1	7.0	48.8	5.7	27.9	5.0	47.2	2.9	430
Musical show	40.3	1.8	31.9	1.5	36.6	7.7	41.9	2.3	41.0	1.8	45.8	1.6	429
Operetta	55.1	1.6	38.3	1.4	41.5	5.9	37.2	2.6	27.9	1.5	43.1	1.4	352
Festival													
Chorus	50.1	1.5	42.6	1.3	36.6	1.7	39.5	1.9	36.1	1.5	51.4	1.8	349
Band	40.1	1.4	42.6	1.6	29.3	1.3	32.6	2.0	26.2	1.4	23.6	1.5	247
Orchestra	1.9	1.0	4.3	1.0	4.9	2.0	14.0	1.8	16.4	2.0	19.4	1.2	58
Other	11.6	4.2	6.4	5.3	29.3	2.2	18.6	4.9	13.1	4.9	18.1	5.8	300
All performances, all teachers	91.9	11.4	95.9	12.0	87.2	18.9	93.5	14.7	89.7	10.1	85.7	10.2	5777
Percent of teachers not responding	8.1	—	4.1	—	12.8	—	6.5	—	10.3	—	14.3	—	—
Total percent	100.0	—	100.0	—	100.0	—	100.0	—	100.0	—	100.0	—	—

TABLE 15

PERCENT OF MEN AND WOMEN MUSIC TEACHERS WHO DIRECTED OR COACHED CONTEST PERFORMANCES ACCORDING TO TYPE OF CONTEST ENTRY AND COMMUNITY POPULATION, 1953-1954

Type of Contest Entry	Community Population												Percent of all Teachers Responding
	Under 2,500		2,500-4,999		5,000-9,999		10,000-29,999		30,000-99,999		100,000 and over		
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	
Instrumental solo	43.1%	21.3%	57.9%	2.6%	62.1%	——%	64.7%	——%	39.3%	10.7%	47.1%	11.8%	59.8%
Band	40.6	14.2	60.5	2.6	58.6	——	64.7	11.8	28.6	——	41.2	5.9	54.2
Instrumental ensemble	35.5	16.8	55.3	2.6	58.6	——	64.7	——	43.1	7.1	32.4	5.9	51.5
Vocal ensemble	22.6	26.5	26.3	21.1	27.6	41.4	5.9	17.6	7.1	32.1	5.9	8.8	44.5
Vocal solo	22.6	24.5	31.6	26.3	37.9	27.6	5.9	11.8	7.1	32.1	8.8	8.8	44.5
Chorus	23.9	20.6	26.3	18.4	37.9	20.7	——	11.8	3.6	7.1	11.8	2.9	37.5
Orchestra	1.3	——	2.6	——	6.9	——	5.9	——	7.1	3.6	23.5	——	5.6
Percent of teachers	66.0		77.6		61.7		37.0		41.2		40.5		56.9
Percent of teachers not responding	34.0		22.4		38.3		63.0		58.8		59.5		43.1
Total percent	100.0		100.0		100.0		100.0		100.0		100.0		100.0

TABLE 16

AVERAGE NUMBER OF HOURS AND MINUTES DEVOTED WEEKLY OUTSIDE OF SCHOOL HOURS BY MEN AND WOMEN MUSIC TEACHERS FOR PERFORMANCE PREPARATION AND PERCENT OF TEACHERS WHO RESPONDED, ACCORDING TO COMMUNITY POPULATION, 1953-1954

Music Teachers	Community Population												All teachers, all population groups	
	Under 2,500		2,500-4,999		5,000-9,999		10,000-29,999		30,000-99,999		100,000 and over			
	Hours and minutes	Per-cent	Hours and minutes	Per-cent	Hours and minutes	Per-cent	Hours and minutes	Per-cent	Hours and minutes	Per-cent	Hours and minutes	Per-cent	Hours and minutes	Per-cent
Men	5:10	37.9	10:50	61.2	5:35	48.9	5:42	30.4	6:47	36.8	4:58	27.4	6:16	38.6
Women	3:59	38.7	4:55	26.5	5:37	34.0	4:06	32.6	3:33	38.2	7:23	32.1	4:38	35.5
Both	4:34	76.6	9:03	87.7	5:36	82.9	4:52	63.0	5:08	75.0	6:16	59.5	5:29	74.1
Percent of teachers not responding	——	23.4	——	12.3	——	17.1	——	37.0	——	25.0	——	40.5	——	25.9
Total percent	——	100.0	——	100.0	——	100.0	——	100.0	——	100.0	——	100.0	——	100.0

cent of teachers who responded according to community population. The data are based on the replies of 329 teachers, or 74 percent of the respondents.

Service Organizations and Community Activities

It is often desirable and necessary that music teachers assume an active role in local service organizations and community activities. Membership in several local organizations is frequently expected. Because of this membership and their accessibility to entertainment and program material, music teachers may be required to assume as much responsibility for musical programs in the community as for music education and musical programs in the school.

No attempt was made to measure the extent to which music teachers felt pressure from the school and the community to become members of local organizations or to participate in the presentation of programs in the community. In the study *Teacher Load in 1950*, it is reported that 49 percent of the teachers felt some pressure to participate in parent-teacher associations and that 51 percent felt some pressure to participate in teacher associations.[13]

Table 17 shows the average number of hours devoted weekly to service organizations and community activities by men and women music teachers according to community population. The data are based on the replies of 472 teachers, or 89 percent of the respondents. The organizations and activities are listed in order according to the amount of time both men and women teachers in the six community population groups devoted weekly to the particular organization or activity.

All teachers in the six population groups appeared to devote more time per week to church activities than to any other organization or activity. Teachers reporting this activity indicated they directed the choir, sang in the choir, played the organ, or taught a Sunday school class. On the whole both men and women music teachers seemed to devote more time weekly to some type of community musical activity than they did to youth groups or civic groups. Community music groups to which teachers devoted time were the civic orchestra, civic band, and dance band. Other activities to which teachers reported devoting time included accompanying for solos presented by students at civic clubs, attending state music conventions, playing in National Guard bands, directing community choruses, working with band boosters clubs, studying their performing medium, active membership in the American Legion Auxiliary, working with community projects, memberships and chairmanships in local and state music organizations, director of an industrial men's chorus, chairman of Indiana Music Educators Association Music for Early Childhood Committee, and chamber music performances. These activities ranked fourth in the amount of time devoted weekly to all organizations and activities.

It appears that the average number of hours music teachers devoted weekly to service organizations and community activities was somewhat more than the average number of hours reported by teachers in *Teaching Load in 1950*.[14] The average amount of time devoted per week to organizations and community activities by teachers reporting in the latter study

[13] *Teaching Load in 1950*, p. 20.

[14] *loc. cit.*

Percent of teachers not responding / Total percent

23.4	100.0
12.3	100.0
17.1	100.0
37.0	100.0
25.0	100.0
40.5	100.0
25.9	100.0

TABLE 17
AVERAGE NUMBER OF HOURS DEVOTED WEEKLY TO SERVICE ORGANIZATIONS AND COMMUNITY ACTIVITIES BY MEN AND WOMEN MUSIC TEACHERS, ACCORDING TO COMMUNITY POPULATION, 1953-1954

Organization and Activity	*Community Population*											
	Under 2,500		*2,500-4,999*		*5,000-9,999*		*10,000-29,999*		*30,000-99,999*		*100,000 and over*	
	Men	*Women*	*Men*	*Women*	*Men*	*Women*	*Men*	*Women*	*Men*	*Women*	*Men*	*Women*
Church activities	2:23	1:19	2:10	1:38	2:30	2:32	3:05	2:33	2:33	4:04	3:23	3:18
Civic orchestra	1:45	2:16	5:30	——	——	8:00	1:55	1:50	2:07	1:27	2:19	2:28
Dance band	3:00	1:21	2:01	——	4:00	——	5:20	——	4:49	——	2:37	1:18
Civic band	2:15	2:30	1:40	——	1:41	——	2:15	——	1:36	:45	3:00	1:30
Youth serving groups	2.36	1:16	1:51	——	1:02	1:00	:28	:50	:23	1:00	1:20	1:18
Civic groups	1:34	1:26	1:04	:20	1:22	:50	:55	:59	1:07	:37	1:21	:57
Men's groups	1:08	:04	1:52	——	:32	:10	:54	:10	1:25	——	1:12	:23
Women's groups	:04	1:13	——	:49	:15	1:02	:08	:50	1:00	:59	——	1:06
Teacher's groups	:44	:45	:36	:34	:27	:40	:26	:33	:30	:21	:42	:50
Parent-teachers associations	:34	:42	:37	:36	:27	:35	:25	:29	:18	:25	:16	:27
Others	1:24	1:16	1:42	1:57	1:39	1:23	3:22	1:30	2:12	1:51	4:11	1:32
Total hours	4:00	**2:42**	6:38	3.23	4:55	4:00	5:40	3:21	4:56	3.31	6:52	4:25
Percent of teachers responding	89.8		67.3		91.5		91.3		92.6		95.2	
Percent not responding	10.2		32.7		8.5		8.7		7.4		4.8	
Total percent	100.0		100.0		100.0		100.0		100.0		100.0	

was three and eight-tenths hours. The average amount of time devoted weekly to organizations and community activities by music teachers was three hours and fifty-nine minutes.

Selected Unsolicited Comments

Following are a few selected unsolicited comments made by the responding music teachers. The comments demonstrate considerable concern regarding their teaching load and related activities. "All civic programs, operettas, festival and contest performances rehearsed after school hours. Gave 48 programs during current year." "No music room in either school—other students must study while my Tonette class rehearses." "Sectional rehearsals every day after school." "Teach choir at noon." "Thirty minutes a day for preparation—not nearly enough time. Work with children who are especially interested in class piano." "No music room, song books are kept in room. There are no pianos." "Travel from school to school during lunch break."

Conclusions

In some of the areas investigated the music teacher's load appears to be heavier than the teaching load for all teachers reported in two other studies. Apparently this was also true with regard to the recommendations concerning teaching load as established by the North Central Association of Colleges and Secondary Schools.

Average Work Week.—The average number of hours and minutes in the work week for music teachers who responded was fifty-one hours and fifty-five minutes. The average number of hours and minutes in the music teacher's work week appears to be more than the average number of hours and minutes reported by teachers in the study *Teaching Load in 1950.*[15]

Some Implications for the Music Education Program.—The results of this project indicate the need for research and action on the part of responsible school officers.

It was found that 51 percent of the responding teachers taught at all school levels: elementary, junior high, and senior high. Forty-two and three-tenths percent taught in two areas—vocal and instrumental music. In view of the music teacher's average work week of fifty-one hours and fifty-five minutes per week devoted to all duties and activities, a question may be raised regarding the quality of the music education program in many schools.

Considering the need for an expanded recruitment of qualified teachers and the retention of these teachers, some of the data presented proves discouraging.

Recommendations

Administrators may do well to reconsider their policies with regard to certain practices and demands which have an effect on the teachers in their school. Following are five procedures which may prove helpful in evaluating teaching load.

1. Considered policies should be adopted with regard to what constitutes a reasonable body of assignments for a classroom teacher.

2. Facts concerning the total assignments of each teacher should be available in a form that makes analysis possible.

3. Systematic study should be made of each teacher's assignments and a formula or other objective comparison developed to serve as a basis for equalizing loads.

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[15] *Teaching Load in 1950*, pp. 40-41.

4. Classroom teachers and school administrators should undertake cooperative efforts to solve the problems of teacher load.

5. Administrators and school boards should adopt no new school services until (a) added personnel can be provided to carry the weight of the new undertaking, or (b) old activities can be eliminated or curtailed in order to provide time for the new.[16]

The average amount of time music teachers devoted weekly to assigned duties other than classroom teaching represented a considerable number of hours which might otherwise have been spent working with individuals, counseling, or preparing lesson plans.

The teacher-aide experimental program which was begun in 1952 in the schools of Bay City, Michigan, apparently has met with considerable success. In a study of the duties performed by teachers in the Bay City schools, the findings showed that teachers spent between five and eight hours per week on clerical activities. Through the use of teacher-aides for various duties the following results have been noted:

1. The teachers spent twice as much time on lesson plans.
2. Recitation time increased 57 percent.
3. Pupil counseling was increased by 90 percent.[17]

The time spent by music teachers traveling from town to town or school to school to fulfill their teaching assignments is lost for instruction. The consolidation of schools in small towns into larger units is suggested. At a recent conference on education held in Fort Wayne, Indiana, greater consolidation of school townships, especially in areas of low assessed valuations, was urged.[18]

The following suggestions concerning the administration of the music teacher's teaching load were made by Harold C. Youngberg.

1. *Time for Planning.*—Every teacher needs time for preparation or conference, particularly at the secondary level.

2. *Comparable Load with Other Teachers.*—It is generally understood that the music teacher may occasionally carry larger classes than the academic teacher for the sake of group success. Equivalent credit should be given for time involved in the preparation and presentation of public performances. Additional instructional personnel should be provided when the time comes to relieve the problem of over-enrollment in classes. A growing music department should not be penalized for lack of teacher time. Classes which are small due to specialized student needs should not be subject to rigid pupil-teacher ratio but should be averaged or balanced with the larger enrollment in other classes.[19]

This report has indicated that many of the music teachers who responded to the investigation are carrying a heavy teaching load. It is hoped that through the presentation of the data, action for a balanced and more effective music education program, reaching a greater number of students, may result.

Jordan College of Music, Butler University

[16] *Teaching Load in 1950*, pp. 40-41.

[17] National Citizens Commission for Public Schools, "Aides Help Efficiency in Teaching," *Better Schools*, I (June 1952), 9.

[18] National Citizens Commission for Public Schools, "Consolidation is Urged by Conference," *Better Schools*, I (October 1955), 7.

[19] Music Educators National Conference, *Music in American Education* (Washington: The Conference, 1955), pp. 20-21.

A Study of Score Reading Ability of Musicians

LOUIS A. HANSEN

THE PURPOSE of this study was to measure one aspect of score reading ability of musicians and to determine the relationship of selected factors to this ability.[1] Among these factors was the amount of training in music theory courses; others included the principal medium of performance of the musicians, length of study and experience in the principal medium of performance, keyboard facility, directing experience, part sung in ensemble, age, and sex. Also investigated were the relationships between achievement in score reading and the method of reading and listening used predominantly in determining the accuracy of harmonic effect, and between score reading achievement and the extent of analysis or recognition of chord function.

To accomplish these ends a test was developed and the investigation was conducted among musicians either preparing for, or already active in a musical career, namely, undergraduate and graduate music majors in colleges and universities.

Development of the Test

In devising the test these considerations were paramount.

1. A test utilizing the choral medium appeared best suited to the rationale of the study. This being the case, the musical passages employed in the test were selected from a fairly representative sample of readily available literature which high school, college, and church choirs might use.

2. In order to test functional score reading, the musical excerpts selected for use should be a phrase or more in length, providing complete contextual meaning for each tone and chord. Moreover, the printed scores should be unchanged from the composer's intentions, all errors occurring only in the recorded performances used in the test.

3. Errors in performance should be such as could logically be made during an actual musical rehearsal. These errors, however, should not sound like errors when judged by listening alone, but should become apparent only through simultaneously inspecting of the score. Two examples of the type of musical passages used are shown in Figure 1. These also illustrate the type of performance errors which were introduced and show the boxes for indicating recognition of the mistakes.

Because the test was concerned with the accurate reading and hearing of tones and harmonies, and could therefore possibly measure the extent of a functional use of knowledge of harmony, the errors of performance occurred in a representative sampling of the commonly used chords. In order to keep the test within reasonable time limits and also provide sufficient items, most of the excerpts had more than one error. This was reasonable also from a practical viewpoint; singers do

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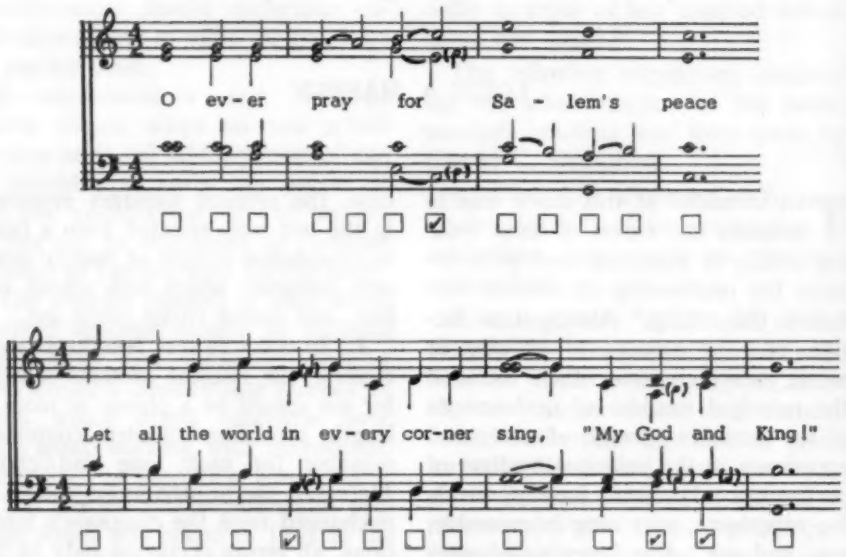
Fig. 1. Examples of musical excerpts, performance errors introduced (small notes in parentheses), and method of marking errors.

not necessarily confine themselves to one wrong tone per passage. In order, further, that the test might approximate as nearly as possible a rehearsal situation, and thereby increase its functional value, it was considered advisable to repeat each passage. This decision was based on the reasoning that in rehearsing a selection the director may think he detects an error, but often cannot be quite certain since music is complex and passes quickly. Thus he may call for a repetition of the passage to confirm his judgment regarding the errors. In the test the repetition of each passage was exactly the same as the first hearing. To aid in orientation, each excerpt was preceded by the hummed pitch of the starting note or chord. The test was recorded on magnetic tape using one voice to a part. The scores were legible manuscript reproduced lithographically, black on white, resembling printed music as much as possible; the words were included. Preliminary tests were administered to the same types of individuals and groups as those for which the final form was intended. The test items (the errors in performance) were analyzed for difficulty and discriminating power, and those retained in the final form represented the best in the judgment of the author. The final form contained thirty musical excerpts having a total of 118 errors, or test items.

In the preliminary tests the subjects were asked to indicate the note or chord incorrectly performed by checking the corresponding square, and were also asked to circle, if possible, the specific note or notes in error. A comparison of the rank order of scores

obtained by merely checking the squares, and scores obtained by checking squares and/or circling the notes yielded a rank-difference coefficient of .997, closely approaching perfect correlation. Merely checking the squares and allowing one point per item still made possible the determination of differences in the ability and knowledge demanded of the subjects. The finer discrimination required to circle the exact notes was apparently not needed for the purpose of the test.

The final test tape recording required thirty-six minutes. An accompanying questionnaire provided a means for obtaining data pertaining to status of theory training and other characteristics. The entire procedure of reading instructions, testing, and answering the questionnaire was designed to require no more than the usual class period of fifty minutes.

Administration of the Test

The sample obtained for the study consisted of 260 musicians from eight colleges and universities located in five midwestern states, as shown in Table 1. The test was administered in lower and upper division theory classes, conducting classes, and various graduate classes. For test validation purposes, a criterion group of twenty-five successful musicians was also obtained. Thus, two general criteria were applied: (a) occupation of an advanced position of musical responsibility, or (b) achievement of superior musical results. The range and nature of the criterion group, and the general criteria by which they were selected are detailed in Table 2.

The Relationship Between Test Achievement and Theory Training

Since theory training was thought to contribute to the development of the ability measured by the test, the subjects were classified according to the amount of training, as summarized in Table 1. These classifications were: (a) one year or less of theory, (b) two years or less, but more than one year of theory, and (c) three years or more of theory.

In order to deal with the data as a whole, and to have a sufficient number of subjects in each classification, it was necessary to determine whether the data for each classification came from homogeneous populations and could be pooled. Table 3, in which the homogeneity of distribution of the scores of the subjects having three or more years of theory is tested, provides an example of the similar analyses made for the groups having one and two years of training.

TABLE 1
SCHOOLS PARTICIPATING IN THE STUDY, AND CLASSIFICATION OF SUBJECTS ACCORDING TO AMOUNT OF THEORY TRAINING

School	*Type*	*Theory Training*			
		1 year	*2 years*	*3 or more years*	*Totals*
A	State University	29	47	20	96
B	State College	31	10	11	52
C	State University			25	25
D	Junior College	19	13		32
E	State College	19			19
F	Teachers College			11	11
G	State University	7	6	1	14
H	Liberal Arts College	5	5	1	11
		110	81	69	260

TABLE 2
MEMBERS OF THE CRITERION GROUP, AND QUALIFICATIONS FOR MEMBERSHIP ACCORDING TO THE GENERAL CRITERIA

Member	*Position or Occupation or Other Evidence of Superior Musicianship*
1	Choral conductor in state university
2	Choral conductor in state university
3	Theory teacher in state university
4	Instrumental director and teacher in state university
5	Theory and instrumental teacher in state university
6	Successful high school choral director
7	Composer, and successful high school instrumental and choral director
8	Successful high school choral and instrumental director
9	Instrumental director and teacher in state university
10	Successful high school choral director
11	Composer, and successful high school instrumental and choral director
12	Composer, and college choral director
13	Composer, head of college music department, choral director, concert organist
14	Instrumental director and theory teacher in junior college
15	Choral director in state university
16	Composer, director of clinic bands, instrumental adjudicator
17	Instrumental director in state university; adjudicator
18	Choir director and theory teacher in state college
19	Instrumental teacher and director in state university
20	Head of music department of state college; instrumental and choral director
21	Successful high school choral and instrumental director
22	Choral director in college
23	Instrumental director and teacher in state university
24	Theory teacher in state college
25	Instrumental director in state university

The distributions of scores of the subjects in each category of theory training were found to be homogeneous among the schools included in the sample. These scores were therefore pooled in the subsequent tests of significance between the means of the groups. By inspection it was found possible to include the scores of the subjects from schools G and H, which provided fewer subjects, with the schools included in each classification, making the totals 110, 81, and 69 respectively.

In comparing the mean scores of the three groups, as shown in Table 4, it was found that the means differed significantly between the group having one and that having two years of theory training, but that there was no significant difference between the means of the group having two years and that having three or more years of training. In order to test this important finding further, the homogeneity of distribution of the scores of these two latter groups was tested by use of the chi square statistic. The distribution was found to be quite homogeneous.

Test Reliability and Validity

In the preliminary tests the reliability was calculated by correlating the split halves based on alternate items. This again appeared to be the best manner of dividing the test into presumably equal halves on a chance basis. By the nature of the test, it was a rather rigorous test of reliability.

In estimating the reliability of the test, a random sample of fifty cases was decided upon, but since the variable amount of theory training was believed to be important, a stratified random sample was chosen. Each group contributed in proportion to its number to the total of fifty. The criterion group was also included, since this group was also to be used in determining the validity of the test.

The coefficient of correlation between the split halves was computed by the product-moment method, and the reliability of the full-length test was estimated by use of the Spearman-Brown formula. A coefficient of .98 was obtained, indicating that the test was highly reliable, or measured very con-

TABLE 3
ANALYSIS OF HOMOGENEITY OF DISTRIBUTION OF SCORES OF SUBJECTS HAVING THREE YEARS OR MORE OF THEORY TRAINING: SCHOOLS A, B, C, AND F

Score interval	*Schools* A	B	C	F	*Totals*
76-102	1	1	6	2	10
51-75	4	2	3	0	9
26-50	10	6	12	8	36
8-25	5	2	4	1	12
Totals	20	11	25	11	67

$$\chi^2 = \sum \left[\frac{(f_o - f_e)^2}{f_e} \right]$$

$\chi^2 = 7.405$

d.f. = 9 .70>P>.50

sistently. The standard error of measurement was computed to be ±3.41.

Three methods of estimating the validity of the test were used. First, tests of the significance of the difference of the mean scores of the criterion group and of each of the other groups were calculated. Although a significant difference had already been found between the mean of the group having one year of theory training and that of the group having two years, and no significant difference was found between the mean of the group with two years of theory and that having three or more years, the comparisons between the criterion group and each of the other groups were nevertheless made in order to establish the level of confidence at which the means could be said to be significantly different. The results obtained are shown in Table 5. The obtained ratio in each comparison was significant at the .001 level, indicating that there was less than one chance in 1,000 that differences between the means of the criterion group and each of the samples could have occurred by chance. Thus, the hypothesis that superior musicians would achieve significantly better in the ability measured by the test than would unselected musicians was proven correct, and on this basis the test was judged to have validity.

TABLE 4
COMPARISONS BETWEEN GROUPS CLASSIFIED ACCORDING TO AMOUNT OF THEORY TRAINING: T- AND D-TESTS

Statistic	*1 year of theory*	*2 years of theory*
N	110	81
ΣX	3,072	3,154
ΣX²	107,658	148,616
X	27.93	38.94
F	1.6079	
	d.f. = 80, 109	.05>P>.01
d	1.477	
	n = 81, 110	P<.01

	2 years of theory	*3 or more years of theory*
N	81	69
ΣX	3,154	3,060
ΣX²	148,616	162,868
X	38.94	44.34
F	1.2384	
	d.f. = 68, 80	P>.05
t	.2859	
	d.f. = 148	.8>P>.7

A second method of estimating test validity involved several related approaches utilizing the same data. One approach was to analyze the variation of the scores between groups by method of ranks. Table 6 gives the distribution of test scores for the group having one year of theory training, the

TABLE 5
COMPARISON BETWEEN THE CRITERION GROUP AND EACH GROUP CLASSIFIED ACCORDING TO AMOUNT OF THEORY TRAINING

Group	*d.f.*	*F*	*P*	*Mean of Criterion*	*Mean of Group*	*t*	*P*
1 year of theory	24, 109	1.2871	.05	73.36	27.93	14.1086	P<.001
2 years of theory	80, 24	1.2494	.05	73.36	38.94	8.5814	P<.001
3 or more yrs. theory	68, 24	1.5473	.05	73.36	44.34	6.5360	P<.001

pooled groups having two, and three or more, years of training and the criterion group. The score intervals were assigned ranks according to frequencies. Applying the appropriate *chi* square formula it was found that there was substantial agreement between the score ranks and the groups. The rank correlation ratio for the groups was estimated to be .61. This ratio, which is not comparable to the product-moment coefficient, indicated that the variation of the score ranks was essentially in accord with that expected for groups on increasing levels of musical competence. Apparently the test possessed validity, and was measuring that aspect of musicianship associated with score reading.

The data of Table 6 suggested another method of establishing test validity. Testing the homogeneity of two frequency distributions provides a method of establishing test validity.[2] This was done with the data as follows:

1. The distribution of test scores of the theory group with one year of training was compared with the distribution of test scores of the criterion group.

2. The distribution of test scores of the theory group with two and more years of training was compared with the distribution of test scores of the criterion group.

The results of these comparisons were:

1. Comparison A.

$$X^2=\frac{1}{(.1852)(.8148)}(18.7940-4.6300)$$

$X^2=93.863$ n=8 P<.001

2. Comparison B.

$$X^2=\frac{1}{(.1429)(.8571)}(10.5744-3.5725)$$

$X^2=57.1583$ n=8 P<.001

Since the two *chi*-square values have probability values less than .001, it was concluded that the distributions of test scores for the two theory groups

[2]Palmer O. Johnson, *Statistical Methods in Research* (New York: Prentice-Hall, Inc., 1949), pp. 94-96.

TABLE 6
DISTRIBUTION OF TEST SCORES FOR MUSICIANS GROUPED ACCORDING TO AMOUNT OF THEORY TRAINING, AND FOR THE CRITERION GROUP

Group	*Test Scores* 6-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-102
A (1 year)	31	41	21	9	4	2	1	0	1
B (2, 3+ years)	9	40	35	25	19	6	6	2	8
Criterion	0	0	0	1	5	6	3	5	5

were significantly different from the distribution of test scores of the criterion group.

Although no significance could be attached to the difference in the two *chi*-square values, it did indicate the possibility of another approach.

An examination of Table 6 reveals that 17 persons of the 110 in Group A had scores which overlapped those of the 25 individuals in the Criterion Group. Similarly, 66 persons of the 150 in Group B had scores which overlapped those of the 25 individuals in the Criterion Group. Thus, 15.45 percent of the 110 individuals in Group A had scores which overlapped those of the 25 individuals in the Criterion Group. Similarly, 44 percent of the 150 individuals in Group B had scores which overlapped those of the 25 individuals in the Criterion Group. Johnson suggests a method for testing the significance of the difference between percentages.[3] Application of this method ran as follows:

$$X = \frac{\frac{t_1}{n_1} - \frac{t_2}{n_2}}{p_o q_o \left(\frac{1}{n_1} - \frac{1}{n_2}\right)}$$

$$X = \frac{.4400 - .1545}{\sqrt{(.3192)(.6808)(.0091 - .0067)}}$$

$$X = 4.84 \qquad P < .01$$

Referred to the normal scale, it was found that the X value of 4.84 has a probability value less than .01. This result indicates that the test possesses validity since the difference in percentages is significant.

The third principal method of establishing the validity of the test was to compare the test achievement of the individuals receiving "above average" marks (grades of A or B) in their most recent theory courses with the test achievement of the individuals receiving "average or below" marks (grades of C or below). Preliminary to this a study was made of the reliability of the marks reported by the subjects. A comparison was made of the means of the scores falling in each mark category for each theory course, according to reported achievement and to actual achievement as found in school records. It was found in each comparison that there was no significant difference. This phase of investigation was possible only for the individuals from schools A and H, but these schools provided over one-third of the total number of test results, and there was no reason to believe that the other returns would deviate from these findings to any appreciable extent.

The schools providing data, and the subject areas for which sufficient data were available to make comparisons possible, are shown in Table 7. A significant difference in test achievement between high and low rated groups was found for the individuals at *all* levels of training only in ear training. And although the persons having three or more years of training were several years removed from their most recent course in ear training, yet their marks in ear training at that earlier time apparently predicted their achievement on the test. Ear training is probably the most closely related of all theory courses to the ability measured by the test, that is, reading and hearing intervals and chords. Since achievement in ear training courses according to school marks corresponded significantly with test achievement, additional proof of the validity of the test was provided.

[3] Johnson, pp. 80-81.

TABLE 7
COMPARISONS IN TEST ACHIEVEMENT BETWEEN SUBJECTS RECEIVING "ABOVE AVERAGE," AND SUBJECTS RECEIVING "AVERAGE OR BELOW" MARKS IN MUSIC THEORY COURSES

Years of theory training	*Course*	*Schools Pooled*	*d.f.*	*F*	*P*	*X of "AA"*	*X of "AOB"*	*t*	*Probability*
1	Harmony	A,D,E,H	29,34	3.34	<.01	34.37	25.11	1.975*	.05>P>.01
	Ear Training	A,D,E,H	28,35	8.63	<.01	38.07	22.39	3.270*	<.01
	Keyb. Harmony	A,D	21,21	8.68	<.01	41.05	23.77	2.945*	<.01
	"Theory"	B,G	21,11	1.27	>.05	32.75	23.18	3.430	<.01
2	Harmony	A,B,D,H	37,36	2.682	<.01	42.71	35.05	1.616*	>.05
	Ear Training	A,B,D,H	35,35	4.474	<.01	46.56	30.58	2.115*	<.01
	Keyb. Harmony	A	27,18	4.23	<.01	46.89	34.68	1.694*	.05>P>.01
3 or more	Harmony	A,C,F,G,H	29,27	1.05	>.05	47.67	41.29	1.080	>.05
	Ear Training	A,C,F,H	28,26	3.11	<.01	55.24	34.04	1.701*	<.01
	Keyb. Harmony	A	13,5	4.16	>.05	44.14	27.67	1.785	>.05

*Behrens-Fisher d-test.

The Relationship of Selected Factors with Test Achievement

In making the analyses, the data for all subjects were pooled. In each analysis only the scores of the individuals providing data pertinent to the characteristics being studied were used.

Chi square was used to test the hypothesis that any observed differences between groups in the distribution of scores were due to chance, i.e., that the factor under consideration had no significant relationship to test achievement. In this brief report it is possible to present only a summary of the results.

The following factors were found to have a significant relationship with higher test achievement:

1. The choice of piano or organ as the principal medium of performance.
2. Having approximately six years or more of piano experience (significant for all subjects pooled; possibly significant for voice majors having approximately seven or more years of experience; not significant for string, woodwind, or brass majors alone).
3. Having approximately six years or more of formal study on the piano.
4. The ability to play hymns and simple accompaniments at sight on the piano.
5. Possibly, the ability to improvise some type of piano accompaniment for simple melodies.
6. The predominant use of listening for the mode or quality of chords (major, minor, etc.) in determining the accuracy of harmonic effect. The majority of subjects, however, used predominantly a melodic approach, reading and listening to one or two parts at a time, in determining the accuracy of performance.

Other factors selected for study were found to have no significant relationship to achievement in the ability measured by the test: (a) age, (b) sex, (c) the part sung in ensemble, (d) the amount of singing experience or formal voice study of voice majors, (e) the choice of a string, brass, or woodwind instrument as the principal medium of performance of instrumental majors, (f) the amount of experience or formal study by instrumental majors (string, brass, or woodwind) on their principal

instrument, (g) the amount of either choral or instrumental directing experience (from the data available), (h) the extent of use of analysis or recognition of chord function (I, IV, V, etc.) in determining the accuracy of performance.

Conclusions

From the results of the study the following conclusions were reached:

1. A valid and reliable test was constructed to measure certain aspects of score reading ability of musicians, specifically, the ability to detect melodic and harmonic errors in the performance of choral music while inspecting the score.

2. The test is unique in measuring that aspect of score reading, ability concerned with the aural-visual discrimination of tones and harmonies as they occur in the context of complete musical phrases, and as that ability functions in a simulated practical situation.

3. The test points the way toward fulfilling a need on the undergraduate and graduate levels for a measure of the practical application of the training related to the score reading aspects of musicianship, or for a measure of the functional value of the training which is designed to contribute to score reading ability.

4. According to differences in levels of achievement, having one year or less, or having two years of theory training made a significant difference in achievement in the ability measured by the test. Thus, the courses in theory offered in the first two years of the college music training program, in their cumulative effect, are functional in the application of the training to a practical music situation. Having more than two years of theory did not result in a significant increase in the ability measured by the test. The advanced, or upper level courses do not appear to be of practical use with regard to this ability.

5. A keyboard instrument is the best background for higher achievement in score reading. However, it is necessary to have experience or formal study on the keyboard for a period of approximately six years before score reading as measured by this test is significantly improved. And ability in sight reading material at the piano should be developed at least to the point where hymns and easy accompaniments can be played if score reading is to be significantly improved.

6. Reading and listening to all parts simultaneously so as to recognize the quality (mode) of chords and harmonic intervals should be the method predominantly used in determining the accuracy of their performance. This does not imply, however, that reading and hearing one or two parts at a time should not also be used to some extent.

After the statement of these conclusions it seems appropriate to offer the following observation, drawn from an analysis of the data and results of the study. Some of the results regarding the factors which were found to have a significant association with test achievement were contrary to what could be expected. One would ordinarily expect increased experience with the materials of music to be associated with increased achievement in score reading, but age and the amount of directing experience were found to have no significant relationship with the ability measured by the test. Also, upper level and graduate students, who had more formal training in music courses and more experience with music, did not achieve significantly better scores than students with only two years of academic training. A

few individuals with comparatively little academic music training scored as high on the test as the highest scoring members of the criterion group. The inference may be made that, as with so many other attributes of musicianship, ability in the aural-visual discrimination of tones and harmonies is associated with the natural endowments of the individual and that the ability is developed earlier in those individuals having the greatest amount of such endowments.

Recommendations

The results of the study lead to the following recommendations for music education programs on the college level:

1. The finding of a significant difference in the ability measured by the test between musicians having at least two years of theory training and those having only one year suggests that two years of theory training should be the minimum for music students who need to acquire some competence in score reading, or in activities involving the reading of scores.

2. For increased competence in accurately reading comparatively simple scores such as were used in this test, it is necessary to have increased experience on a keyboard instrument. Since only after a period of years—from the data of this study, approximately six years—does the cumulative effect manifest itself in increased score reading competence, it is advisable that all music majors should have as much piano experience as possible if it is desired that score reading ability be significantly improved.

3. Ability at the keyboard should be developed at least to the point where material such as hymn tunes and easy accompaniments can be played at sight. And possibly the ability to improvise at the piano should be developed to the point where accompaniments can be provided for simple melodies.

4. If it is desired that achievement in theory courses be measured in terms of functional skills acquired, among which would be the ability to read and hear the tonal content of music, the testing technique utilized in this study could be employed.

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The Development of a Music Reaction Test to Measure Affective and Aesthetic Sensitivity

WALTER M. LIFTON

FOR SOME TIME now there has been interest in discovering ways to measure the empathic and affective sensitivity of counseling trainees (8, 9). In the development of a pilot study to test the relationship between empathy and aesthetic sensitivity it became necessary to devise an instrument which might provide a measure of the latter characteristic. This article is devoted to a discussion of the development and rationale behind the Music Reaction Test.*

Definition of Aesthetic Sensitivity

Definitions of the meaning of the term "aesthetic sensitivity" have paralleled changing concepts in psychology about the nature of man. Man is seen as not only responding to stimuli but also as reinterpreting their meaning. This transition can be illustrated by a brief survey of the defined role of aesthetic sensitivity in music. Some earlier writers like Lee felt the aesthetic person responds to the form of the music itself, rather than to the imagery it produces. Schoen (11) has stated that "what a person finds in music depends on the degree of his susceptibility to musical form—his form-mindedness. Those who are least form-minded will find the value of music in what it suggests to them." He then goes on to state that the latter group are less aesthetically sensitive. The emphasis is based on the assumption that the purest aesthetic qualities come from a reaction to the music itself.

Lundin (10), a more recent writer, describes clearly how these earlier views fitted the psychological philosophies of an earlier era with their emphasis on the stimulus rather than the perceiver. He does not share their companion belief in a person's *inherent* powers or sensitivities. Rather Lundin believes musical responses are acquired, and are therefore culturally determined. Seeing this behavior as an acquired reaction, he feels aesthetic skills are subject to all the principles of learning. The theories, according to Lundin, seem to be of two levels. Those which account for the response in terms of a characteristic property of the stimulus object and others which are based on the response of the listener.

Lundin in evaluating Schoen's theory raises the very pertinent question as to whether it is possible to listen to the musical form itself without associations or emotions. There is no real experimental evidence that such associations lower the quality of aesthetic response.

As we move to present day theories, viewing a person's response from a phenomenological point of view, it is impossible to separate a person's pres-

*This report represents part of a larger study on the relationship of empathy to aesthetic sensitivity. The author was helped in the development of the Music Reaction Test by Aaron Smith, Psychology Department, University of Illinois, who also shared in the testing of the instrument.

ent perceptions from his past experiences and training (13).

Seashore (12), in his book *Psychology of Music,* has expressed the belief that aesthetic experience comes from the meaning an object conveys to the listener. That meaning can take the form of feelings, ideas, desires, needs, or emotions. The aesthetic quality of an object, therefore, becomes a function primarily of the subject's perceptions and of the object and his reactions to it.

For this study then, an aesthetic response is one which reflects the properties of the stimulus as it causes feelings, ideas, desires, etc. to be experienced by the perceiver. The greater aesthetic response is seen as one which produces a greater range and intensity of ideas and emotions in the perceiver.

The Music Reaction Test

Rationale.—In order to assess a subject's sensitivity to musical stimuli it was decided to present subjects with carefully chosen musical selections and solicit free written responses.

It is commonly accepted that people generally do not relate comfortably to individuals who display uncontrolled emotionality. Neither do people relate comfortably to individuals who avoid emotion entirely. (In Rorschach terms we might almost be describing the C *vs* the F kind of person. Maximum communication and empathy seem to occur with people who can accept emotion but express it in controlled fashion [CF-FC].) By the very nature of the instructions to the subjects listening to the selections, we are in reality seeking an assessment of the emotions the subject is feeling, accepting, and is willing to let others see, too. This screening process communicates the manner in which the subjects handle and relate affective experiences.

Selection of Stimuli.—There has been considerable work done on the effect of musical stimuli on subjects. Downey (2), Gilman (4), and others doing some of the original pioneering work, tested people's reaction to selections of music. They generally agreed that the reaction to each selection was an individual matter.

Schoen (11) in reviewing the work of earlier experimenters concludes that if a subject "is given neither title nor program his fancy might take him on a mental journey, the direction of which will depend on his mood, his mental set, his physical condition, his past experience, and numerous other subjective factors, for which the music serves as a stimulus, but all of which may be outside the music itself."

In more recent times W. V. Bingham carried on extensive studies on the mood effect of music. He has been followed by Hevner (5) who developed a method to measure the meaning suggested by the music, in objective and quantitative terms. A check list of adjectives was given Hevner's subjects, each of whom could mark as many adjectives as he liked. Generally her results indicate that the subjects had little difficulty in discerning the mood the composer was trying to convey.

Hevner (6), using the Seashore tests of musical talent, concluded that musical talent as measured by these tests was not observably different between those falling above the highest and below the lowest quartile of intelligence. (Her subjects were college students.) Differences in musical experience and training appeared to bear no observably significant relationship to the Seashore tests for musical talent, or to her check list. Lundin (10) in interpreting Hevner's results suggests that differences in reactions to pitch and key may very well be culturally determined.

Cohen's study (1) suggests that responses to music tend to be more emotional than responses to visual art, thus suggesting that music might more readily supply the type of data we sought. Through the work of Fisher and Fisher (3) it became clear that the use of unfamiliar music might not only overcome some of the cultural problems suggested by Lundin, but they also suggested "that musical preference is not some abstracted aesthetic response, but a reaction which is influenced by personal needs and difficulties in the same way that most other reactions are."

In the selection of the four music pieces used in this research several criteria needed to be applied.

1. Preferably, the material should be unfamiliar. (On pretesting, none of the subjects could identify the selections although several guessed the composers).

2. The keys in which the pieces are played ought to be either of an indefinite nature, or equally divided between major and minor.

3. The selections ought to reflect different emotional intensities.

4. Since verbal cues in music tend to affect the subjects' perceptions, the use of operas or songs should be restricted to unfamiliar languages and scenes.

5. The subjects ought to have an equal opportunity to hear the selections before recording their reactions.

The two music instructors associated with this study tried to meet these criteria. The following pieces, which are briefly described in terms of tonality, were selected.

1. *Andante Assai* (2nd movt.) *of Concerto in G Minor,* Opus 63 by Serge Prokofiev. The tonality of the whole movement is E♭ major although the subjects heard only the first forty-three measures. It would be impossible to associate feeling responses with specific keys because of the transitory character of this section in respect to tonality. Ten measures are in E♭ major, 4 measures in B major, 4 measures in E♭ major, 9 measures in F major, 8 measures in A♭ major, 4 measures in C major and 4 measures in A♭ major.

2. *Allemande* from *Suite No. 1 in D Minor* (*Suites Françaises*) by Johann Sebastian Bach. Tonality is clear.

3. Excerpt from *Suor Angelica* by Giacomo Puccini. Sister Genevieve sings "O dear sisters, just look over yonder where the rays of the sunlight are stealing in the courtyard!" Cloister scene in the early part of the one act opera. The nuns are engaged in recreation—watering flowers and strolling through the cloisters. Tonality: 16 measures are essentially in A major, 6 measures modulate to D major and hence to G major for 37 measures, although the passage traverses many keys, thus weakening tonal identities. The modulatory character of the section would make it difficult to establish key-feeling relationships.

4. *Très Modéré* (4th movt.) of *String Quartet No. 1,* Claude Debussy. The introduction of 14 measures is in D flat major but is of a modulatory nature with chromatic treatment which obscures the basic tonality. A 16 measure sequential passage in which melodic figure is transposed upward diatonically on each repetition has no basic tonality but leads to G minor. The following 83 measures are vaguely in G minor, but as in most impressionistic music the feeling for key is obscured by continuous tonal digressions. It would not be feasible, it seems, to attempt association of feelings with tonality in the case of this music.

Administration.—The subjects used in this study were student teachers in music education. There were twenty subjects, eleven women and nine men. Screening tests indicated the group to be basically normal and of above average intelligence. Each subject was given a sheet which contained the following words at the top. "You will hear different musical selections. After each piece, please write on this sheet a statement of what the music means to you. There are no right or wrong answers.

Just explain your reaction to what you have just heard."

During the initial administration the subjects' comments indicated their awareness of the projective quality of the test. One comment of interest was "Should we write what the music expresses or the feeling it brings up in us?" It was suggested to record their reactions.

After the four selections were completed, the subjects were given the following instructions "This time listen especially for the feelings and emotions involved." Then they heard a replay of the Prokofiev. This was the selection believed to hold the highest affective loading. We wished to see if a changed set by differing instructions would modify the response obtained. Each subject therefore provided five responses of which two were to the same selection.

Scoring.—It was anticipated that the subjects in this study would respond to this ambiguous situation in a fashion comparable to that found in other projective techniques. Some would describe their reactions in terms of form, content, and technique. Others would dwell on the aesthetic and sensual reactions they experienced. It was hoped that responses could be quantified, and that it would be possible to rank the subjects from these responses, using the degree of aesthetic sensitivity each subject presented. The data were treated to see whether there are discrete differences among the subjects in terms of their sensitivity to the nuances and range of emotion in the music.

Several steps were followed in the development of a scoring key for the Music Reaction Test. As a first step, it was felt judges should be able to order the statements according to the variables hypothesized to be important (teaching competence, empathy, musical competence) and this ordering of statements should bear a non-chance relationship to the group rankings developed from scores derived from the Music Reaction Test. Data on teaching competence, empathy, and musical competence were secured by having the subjects rate their classmates on three questions believed to provide measures in these areas.

All of the subjects ranked their classmates on the following questions both at the beginning and at the end of the semester.

Question one was:

> Let's suppose that you are a coordinator of music education in a large city system. You have been given the responsibility of looking over a large number of applications which include those of all of the members of this group. How would you rank them in order of preference to fill the vacancy as a teacher of music on your staff?

It was assumed that ranks obtained from this question would reflect general competence and desirability as a teacher.

Question two was:

> Beginning teachers frequently feel anxious and upset about their jobs, their abilities, and their personal problems. In selecting someone to help people look at their feelings and worries, it is important that the person be someone whom you feel is sensitive to the feelings others may have about the problems that face them. If your list of applicants included the members of the class, rank them in the order in which you would hire them.

The ranks obtained from this quesnote that during pretesting one subempathic qualities. It is interesting to note that during pretesting one subject questioned whether we were asking about a counselor or a teacher. This question was particularly relevant because subsequent results revealed

that on pretesting the people selected as teachers were not generally seen as also empathic. This relationship shifted on post testing.

Question three was:

> In presenting a music appreciation lesson to a general music class, you wish to have a demonstration of the ways in which music can convey feeling. If you were selecting from the members of this class persons who might be able to demonstrate this, in what order would you invite them in to perform?

When this question was first developed we assumed we might get a measure of a person's aesthetic competence. Based upon student's comments and later results, it is believed this question more nearly reflects a student's technical skill as a musician. To insure that subjects had a basis for making judgments in this area, experiences were provided the subjects without their knowledge of its relationship to this study. In a course other than the one where the research took place students were given an assignment to perform on their instrument as if they were demonstrating to a class the musical potentials of their instrument. All subjects then had an equal opportunity to observe their classmates in this area.

It seemed quite likely, and perhaps even necessary, that if a systematic relationship existed between the music statements and the class rankings then there should be a correlation between the judges' subjective ratings based on the variables to be used later in objective scoring and group ranks. To test this idea two judges were given the written responses to the Music Reaction Test and were asked to rank the data according to the following instructions.

Instructions to Judges

A. You will be given statements by twenty different subjects telling what a sample of five musical selections means to them.

Divide the subjects into three piles according to the aesthetic sensitivity displayed in the statements. That is you are to classify these people into three groups determined by their sensitivity to the *feelings* in the music. How reactive are they to the *emotional* content of the music?

Make your selections fairly rapidly; do not worry over the assignment of a subject to a group.

Group 1: Seems to have much more aesthetic sensitivity than the other groups.

Group 2: Seems to have an indeterminate or middle range of this characteristic.

Group 3: Seems to lack sensitivity to the *emotional* aspects of the music.

After you have divided the subjects into these three groups, take each group singly and rank the people in the group from most sensitive to least sensitive. Just give your impression.

B. (After an interval of one half-hour—statements shuffled.) Now once again divide all the subjects into three groups, but this time rate them according to your judgment of their general *musical competence.* Emotional or aesthetic sensitivity will be only one factor in this judgment. You will also need to consider their knowledge of musical techniques and other factors which seem important.

Rank the individuals within each of the three groups.

Both judges made their rankings independently and no information was made available to them on how the subjects had ranked their classmates. (The group data were in terms of code letters.) After the two judges ranked the statements, the statements were well shuffled and put aside for approximately a half-hour. The judges did not discuss or compare their ratings at this time. After the interval, the judges ranked the statements again according to judged position on the second variable, "musical competence."

Before considering if such judgments would predict the group rankings it was necessary to determine if the judges were in reasonable agreement

in assigning ranks to the statements. The judges had very little confidence in their subjective ranking and consequently it seemed prudent to compute a rank difference correlation between the two judges' ratings.

The correlation between the judges for the ratings of "emotional and aesthetic sensitivity" was *rho* = .70. This correlation is significant at better than the .001 level of confidence. Not quite as astounding to the judges was the correlation for the ratings of "musical competence." The correlation was *rho* = .40, which only tends to be significant at the .07 level.

Since it appeared that the judges were in essential agreement on their rankings for emotional sensitivity, these judgments were pooled, and the mean ranks were correlated with the median ranks assigned by the subjects on question two (empathy). The rank order correlation between the ranks assigned the statements by the judges and the ranks assigned the subjects by their classmates was *rho* = .53, which is significant at the .015 level.

Thus it appears that judges can predict with statistical significance the ranks assigned by students when they rate each other for "empathy."

In order to test whether halo existed between the three rankings, it was of considerable interest to see if the ranks assigned by the judges to the musical response statements predicted the subjects' "empathic" standing but bore no significant correlation to the subjects' standing on the other two variables. If the above hypothesis held true we could have greater confidence that judges could rank individuals for their empathic ability as here defined. Accordingly rank difference correlations were computed between the judges' ranks and the class ranks for questions one (desirability as a teacher) and three (musical competence).

The *rho* between the judges' rankings on emotional or aesthetic sensitivity and the class rankings on question one was only .06. The *rho* between judges' rankings and the class rankings on question three was only .03. Clearly there is no relationship of any sort between the positions assigned the subjects by the judges for emotional or aesthetic sensitivity and the positions assigned by the subjects on questions one and three. It would seem then that the significant correlation between judges' rankings and class rankings on question two is not simply an artifact of a general relationship between a student's rank on all tested variables. On the contrary, whatever characteristic leads to a high ranking, by peers on an empathy continuum also is present in the responses that the subjects make to musical selections.

The judges also ranked the subjects for "musical competence" on the basis of their Music Reaction Test statements. The judges did not agree very highly on these decisions (*rho* = .40; t = 1.9; P = .07) and consequently the mean of their judgments correlated only *rho* = .32 with the class standings on question one. This latter correlation is not significant. Of course, it had not been theorized that the subject statements would bear any relationship to rated musical competence so that a chance relationship is to be expected.

The next step seemed to be to refine the basis for judgment of emotional sensitivity and possibly to objectify the cues underlying the judgment into some quantitative system. The judges discussed the factors present in a statement which led them to classify that statement as emotionally sensitive.

The following observations represent the views of both judges:

1. Statements which included fanciful thoughts and comments were rated high on the sensitivity continuum, e.g., "When I listen to this I can see a woman running."

2. Expressions of personal emotion or feeling led to high ratings, e.g., "I feel - - - -," "It makes me feel - - - -."

3. Those who made positive expression of emotion were rated higher than those who made essentially negative emotional comments, e.g., "It made me feel happy" or "It made me feel sad." Though this seems less valid a basis on which to make ratings of emotional sensitivity, the judges, in their discussion, agreed they had both rated positive statements higher than negative.

4. Those who denied emotional impact were rated low, e.g., "It doesn't give me any sort of feeling—it's just poor music."

In exploring the data the following questions were asked: (a) Where do the judges agree with each other but differ from the subjects ranking of themselves? (b) Where do the judges disagree?

Judges disagreed by at least six ranks on the five subjects shown in Table 1. As can be seen from this table, no one judge is consistently in agreement or disagreement with the group ratings, therefore, there is no systematic error by a judge. To decrease this variability between judges it was felt that more specific instructions were needed.

TABLE 1

SUBJECTS ABOUT WHOM JUDGES CANNOT AGREE

Subjects	*Judge 1*	*Judge 2*	*Mean of Judges*	*Subjects' Rankings*
D	16	10	13	14
K	7	19	13	9
L	3	11	7	15.5
P	11	4	7.5	4.5
Q	14	7	10.5	7.5

TABLE 2

SUBJECTS ABOUT WHOM THE JUDGES AND THE GROUPS DISAGREE

Subject	*Judges*	*Group*
G	19	7
H	16.5	10
L	7	15.5
N	1.5	13.5
O	8	14
R	5	12

Subjects were ranked from 1 to 20 with the lower figure judged to be more sensitive.

In assessing areas where the judges' mean and the group median disagreed by at least six ranks several questions were again posed. Is there anything common to these subjects' statements that might have accounted for the judges' deviation from group rankings? Taken by subject the following answers developed (see Table 2).

Subject G's responses were negativistic, hostile, overcritical. The judges possibly reacted to the tone of negative feeling. Subject H was judged relatively insensitive for essentially the same reasons as G. One judge considerably overvalued positive tone of statements of subject L. Judges may have been swayed by fanciful expression of subject N. Judges may have been impressed by subject O's relative verbal facility as compared to a rather inarticulate class. Subject R possibly represents a false positive. This subject does meet the criteria of emotional sensitivity; the lack of accuracy on this one cannot be accounted for.

Based upon these evaluations of this trial ranking, it appears that no one element or factor is able to account for disparity in ratings of these subjects. Judges might have done better if they considered less the direction of the feeling and more the absolute intensity of feeling expressed.

Since each of the factors that the judges agreed on as contributing to their ranking of a statement was obviously not of equal importance in determining the final rating, the judges attempted to weight these factors or categories according to their assumed importance in making the subjective rankings. The weightings and categories used are described in the coding instructions which follow. A study of the cases where judges and group sharply disagreed on the ranking of an individual contributed to the elimination of categories that were unlikely to discriminate (e.g. direction of feeling expressed).

The two judges then proceeded independently to code all statements of all subjects, adhering as closely as possible to the newly developed written scoring instructions. The judges discussed the instructions for a few minutes before beginning coding and several other examples (not from the actual data) were pointed out. Both judges coded successively from "A" through "T" in order to equate scores from any practice effect. The codings were made from separate typescripts.

A rank order correlation was computed in order to estimate the reliability of the scoring method. *Rho* was a very satisfactory .94. In order to determine if the method offers a valid means of predicting empathy ranks, the ranked scores were correlated with the student's position on question two as assigned by the group. *Rho* was .63, which is significant at the .005 level. This, of course, is a higher correlation than was found with the judges' subjective ratings and therefore offers evidence that the weighting procedure and other refinements of the categories were advantageous.

In order to determine the relationship between the clinical judgments of empathy and the MRT score a *rho* was determined for the correlation between the ranks assigned in the clinical judgments and the ranks based on MRT scores. The hypothesis was that the two orderings should show a positively significant relationship since the MRT scores are assumed to be an objectification of clinical judgment (see derivation of MRT scoring procedures). As was expected, the written scoring code correlates rather highly with the subjective clinical rankings ($rho = .77$; $P = .001$).

Since statement five on the Music Reaction Test was in response to the same musical passage as statement one, except that on five the instructions were stated so as to elicit more of an emotional response, a correlation between the criterion (question two—empathy) and the score for the first four statements alone was determined. The resulting correlation was only slightly smaller than that for the total score for all five statements. Statement number five was independently correlated with the criteria and this time the correlation was still smaller though again by a small amount. Therefore, in general, it would seem that the larger the number of statements scored, the more accurate the prediction.

In developing the written scoring key several alternative bases for scoring were considered. One factor which

was explored (but, based upon the results, not included in the final coding key) was the effect of the number of words in each subject's response upon his MRT score. In order to test this hypothesis a rank order correlation was run between the number of words and MRT scores. A *rho* = .47 was obtained. We concluded that the correlation between the number of words and MRT score suggests that the length of response accounts for something less than 25% of the variance of MRT scores.

Based upon the preceding steps the final coding key was developed.

Coding Instructions.—Code by sentences. Code each sentence only once—if it seems to fit in more than one category, code it for the predominant theme. However, if a sentence is principally a technique description but also includes a scorable expression, code the sentence as if the emotional expression were dominant.

Assign a score of plus two (+2) to:

1. *Fanciful thoughts and comments.* Subject is reminded of some activity, scene, character, etc. not directly connected with the music. Exclude comments about composer, conductor, performers.

2. *Expressions of personal feeling or emotion* aroused by the music. This catagory includes such statements as "It makes me happy," "It makes me want to cry," etc. Not including simple statements of "I like" or "dislike it," etc.

Assign a score of plus one (+1) to:

3. *Emotional evaluations of the music.* This category includes comments which are centered on the music rather than on the self. For example, "That's beautiful music" would score here. "That's wonderful music" would score in this category but, "That music makes *me feel wonderful*" would score in category number 2. Also include here such statements as "I like it" or "I don't care for it."

Assign statements in the following category a score of zero (0):

4. *Technique Comments and Objective Descriptive Statements.* This category includes all statements that describe what is occurring musically. For example the statement, "This selection is a violin melody in ¾ time accompanied by pizzicato strings" would be scored in this category. Score zero for all irrelevant comments, e.g., "I recall hearing this in Mr. x's class" and comments on the records themselves, e.g., scratch, etc.

Assign a score of minus one (−1) to:

5. *Denials of feeling.* This category includes statements in which a claim is made that *no* feeling is elicited by the music. Feelings of dislike or other negative emotions are not coded here. The category refers only to statements describing a lack of emotional response.

Summary

Because of a need to evaluate the aesthetic sensitivity of counseling trainees and to test its relationship to empathy, it became necessary to develop an instrument which might provide quantitative measures of aesthetic sensitivity.

In the development of the Music Reaction Test it was necessary to establish a definition of aesthetic sensitivity and to test procedures which might provide data of the type desired.

The coding scale developed proved to be highly reliable. The *rho* between the judges scores was .94. In order to determine if the method offered a valid means of predicting empathy, as defined in the study, the ranked scores achieved by subjects on an empathy question and the Music Reaction Test were correlated. The resulting *rho* was .63 which is significant at the .005 per cent level of confidence.

Subsequent testing of the instrument in other settings demonstrated a high relationship between empathy as judged by peers, and scores derived from the Music Reaction Test.

Chicago, Illinois

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Reviews

EDITED BY PAUL S. IVORY

Learning Music. By Raymond Elliot. Columbus, Ohio: Charles E. Merrill, Inc., 1960; 201 pp.; $3.95.

The past five or six years have seen the publication of numerous books to be used in the education of prospective elementary classroom teachers. Some of the texts have been slanted toward so-called basic music fundamentals, others toward teaching techniques; some have combined basic fundamentals and teaching techniques.

Learning Music, as stated in the preface, introduces teachers and future teachers to the rudiments of music through the use of a piano-and-voice method. The text combines keyboard and vocal reading activities, but the coordination of the two activities is actually left to the college course instructor himself.

Presented under the topic "Singing Skill" are: (a) vocal music reading, and (b) voice technique for the future teacher. Nothing is presented on the development of the child voice, material of this type being reserved for a companion book, *Teaching Music*.

A functional keyboard approach is used. The presentation begins with three-tone songs, and uses the tonic chord. This is followed by the development of the scale from well known songs and the use of I, IV, and V chords, the V_7 chord following. Both major and minor scales (all three forms) are presented with the I, IV, V_7 chord sequences. Even the use of the *ii* and *vi* chords is presented. It would take a student with quite a good musical background to cover this phase of the material in one semester or quarter.

Rhythmic problems are worked out, for the most part, from familiar songs. Counting for rhythm patterns is utilized, but again it is left mainly to the discretion of the instructor to provide additional means necessary to develop rhythmic accuracy.

There are elaborate descriptions for the development of voice technique. The material is in excellent taste, thorough, and in understandable terms for the novice. It would be valuable for review purposes for many voice instructors and majors.

The content is basic but it will take a competent instructor to make it lively and meaningful to the student. The book, which contains a multitude of references usable by the student or teacher with a more than average musical background, would serve well both as a text and as a reference.

EARL E. BEACH

The Interpretation of Bach's Keyboard Works. By Erwin Brodky. Cambridge, Massachusetts: Harvard University Press, 1960; vi, 421 pp.; $10.00.

Erwin Brodky has written an erudite treatise on the interpretation of Bach's keyboard works, a treatise which, at first reading, provides a masterly presentation of existing knowledges and which offers an ingenious set of solutions to existing performance problems. Its drawbacks lie in the direction of selectivity of data. The book is conventionally divided into chapters beginning with a historical review and continuing with sections devoted to problems peculiar to Baroque keyboard music.

There is by now no lack of treatises, both contemporaneous with Baroque composers and in the twentieth century, purporting to solve any and all problems of dynamics, instrument selection, tempo, ornamentation, rhythmic alterations, symbolism, and others. There is rather a plethora of such writings, containing varying amounts of scholarship. The result, to the earnest performer seeking

sufficient knowledge to enable him to give convincing interpretations, has been a painful awareness of the frequency with which authorities contradict each other.

Here Mr. Brodky states a central thesis. On what he feels to be the clearest aesthetic basis, he holds that a comprehensive examination of the content of the body of Bach's keyboard works will reveal, with scarcely any exceptions, the answers to all the musical conundrums we now lump under the all-embracing term, "performance practice." He is quite beautifully methodical. Using a statistical method, he numbers and compares meters, rhythmic devices, note values, tempi, titles, forms, styles, affect devices and ornamentation, to provide through a charting table, method clarification and classification of musical elements that almost suggest of themselves the conclusions he desires the reader to draw. He writes lucidly, simply, and modestly. Where he differs with living or recent authorities, he does so humbly, deprecatingly, and rather charmingly.

Nevertheless, he makes startling, and to the pianist, oftentimes highly unpalatable statements. Playing pieces intended for the harpsichord on the piano is analogous, he claims, to playing arrangements of Beethoven symphonies on the piano, all right for purposes of academic familiarization, but not to be thought of for performance, if the artist has a sincere desire to express the composer's intent. The doublings which he suggests, in the sole exception of two-piano arrangements for performance, however, do not achieve anything like the registration on the harpsichord, and the effect is totally different.

As for the clavichord works, effectively so designated by his statistical method, he states that they must never be played above the *ppp* to *mf* range. On the piano, this would make for dull listening if the piece has an appreciable duration.

In the field of tempo, he cites Quantz, but does so in an apologetically confusing manner, at times accepting him with qualifications, at other times disparaging him, saying that Quantz is incorrect in respect to extremes of tempo but mainly right as regards moderate tempi, and those not too far on either side of *moderato*.

His qualifying consists of accusing Quantz of hyperbole in stating that the music of one hundred years earlier was played "twice as slowly," taking him to mean only that the spirit of slower playing should be observed. He makes no mention of Eta Harich-Schneider, listed in his imposing bibliography, who reconstructed a Loulié chronometer (the first metronome) and discovered the music of the seventeenth century generally was played more rapidly than that of the eighteenth century. This is what is meant by "selectivity of data" in the first paragraph of this review.

The chapter on ornamentation, divided into three sections, one a brief historical review, one on the trill (including the turn and slide), and another on the appoggiatura, admirably recapitulates the main sources, and once again illuminates but does not solve the contradictions in authoritative statements and in a multitude of musical examples. The rules are few and easily learned, the exceptions are multitudinous, about which the author is forced to repeat the two basic dicta: (a) practice good taste, and (b) avoid poor voice leading—the latter, indeed, being comprised within the former.

The section on rhythmic alterations produces several ingenious solutions to specific examples of pieces where the question arises, should the rhythm patterns be altered at all? How to alter them is not difficult to discern; whether or not they should be altered is the more frequent and important question. The author is a staunch supporter of a theory which might be termed "the theory of rhythmic consistency in alteration." If a rhythmic alteration can be consistently applied to all but a few measures or even notes, it may not be adopted, since no measures must depart from the altered rhythm pattern.

In the articulation chapter, he paraphrases and agrees with the basic rules stated by Quantz and C. P. E. Bach concerning detached playing of *allegros*, slurred *adagios*, *legato* for close intervals, *staccato* for distant intervals. For the rest, the stylistic effect (where it can be identified) will decide the articulation. Thus the "caress" effect is invariably a two-note slur, even if the notes are an octave apart. There is one surprise in this chapter, an unequivocal and unsupported

assertion that a single note up-beat is never slurred. This is startling in view of the wealth of evidence for all other assertions.

The chapter on symbolism holds at best an academic interest, since its practical application is limited. The allegorical aspect of subject shape (to represent the cross), the "flight of angels" (rapid fourth leaps) and the whole area of number symbolism impinges on the theory of affects and is important only when it indicates or supplements mood, tempo, and quality of sound and dynamics. Usually, the symbolic revelation will only provide one more verification of what many other musical elements have already dictated, but it is still another link in the chain of evidence which supports the central thesis that a searching analysis of the music reveals ample interpretive data.

To the performer, the most practical value of the book will lie in the voluminous appendices with their detailed suggestions anent the performance of each specific keyboard work. Whether the Bach student follows the details in slavish obedience (of which there is a distinct possibility or danger) or utilizes the directions with a nice discretion, adopting here and rejecting there, the mere fact that his attention is drawn to a wealth of approaches to any composition is sufficient warrant for his enthusiastic attention. Mr. Brodky has made a significant contribution to the performance approach to Bach's keyboard works and, with all our reservations, we feel impelled to add, the most comprehensive approach to date.

BERNHARD WEISER

An Introduction to Folk Music in the United States. By Bruno Nettl. Detroit: Wayne State University Press, 1960; 122 pp.; $2.50.

During the past ten years folk music has become of great interest to a large number of people. Nettl's study is suitably timed to fill the gap of general information felt for a long time by these students of folk music. According to the author, the purpose of his study is to "introduce the layman to the great variety of forms and cultures in American folk music." The volume consists of ten chapters: "Defining Folk Music," "General Characteristics of Folk and Primitive Music," "The Ethnic Backgrounds of American Folk Music," "Indian Music of the United States," "The British Tradition," "Immigrants from Europe and Africa," "Folk Music in the Metropolis," "The Professional Folk Singer," "Collecting and Studying Folk Music," "Folk Music and Cultivated Music." Thirty-two musical examples stress the "variety" of important song types and include ballads, a few spirituals, eight Indian tunes, and eight tunes from different Slavic backgrounds. His information is taken from standard bibliographical aids in the field, including two previous publications by Nettl himself, "North American Indian Musical Styles" and "Music in Primitive Culture."

Nettl handles his topics in a brisk, informal and casual way. This approach provides his book with an attractive quality of easily-understood information. Like many other works of its kind it covers a lot of ground, alternating, for instance, between entire chapters on Indian music and on the British tradition—both certainly unique and outstanding landmarks of American folk music—and a light-handed treatment of the religious folk songs of the United States in a few pages (p. 50, 54) only. Whereas Nettl is impressively instructive and "at home" in his account of Indian music, his examination of the religious folk song is extracted haphazardly and was obviously put together at second or third hand. Furthermore, what is also weak and alarming is his marked lack of consideration of Spanish-American folk music in the U. S. It does not suffice to refer to the music of the Puerto Ricans in New York and "basta." What about the singing of "corridos" and "alabados" in the Western and Southwestern states?

As an introductory book Nettl's study is inevitably incomplete and incidental. But on many of the topics which it considers it is excitingly interesting. For example, in the chapter on folk music in the city, the fate of the music of the Southern whites and Negroes and of non-English speaking groups is discussed wtih great eloquence. According to Nettl, "little music of city origin which takes root in urban folk tradition is at hand: the

folk tradition within the city is dependent on material from the countryside." In addition, his presentation of how to collect and study folk music is genuinely stimulating. So much factual information about recording equipment and media, about transcription, notation and analysis of folk and primitive music, and about some important archives of recordings in the United States is given that many a reader will be glad to have read this particular chapter and to have it at hand for reference.

JOHANNES RIEDEL

The High School Band Director's Handbook. By W. Clyde Duvall. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1960; xii, 209 pp.

The High School Band Director's Handbook offers a unique and comprehensive picture of the high school band program as seen through the eyes and as described in the vernacular of an experienced band director.

The handbook makes available many tested techniques and methods of solving the several problems in band instruction. Chapters include: The Use of Tape Recorders as a Teaching Tool, Festival Preparation, Band Tours, Using a Point System in Grading, Rehearsal Hall Climate, Individual Instruction, and Summer Activities.

In the introduction the author says, "These techniques are not offered the reader with 'Here you are—the only correct way to do these jobs!'" It is hard to take issue with such an approach. If one questions a statement such as this from the chapter on intonation,

> Tune your band frequently. If this job is neglected for a long period of time, players will begin to favor instruments in order to get the band in tune.

the author would but reply, "You do it your way if you like, this is the way I solved the problem." The question then arises, is this the best solution?

Many bandsmen will disagree with basic ideas in the book, both from a philosophical and practical point of view.

"Although individual intonation problems should occasionally be dealt with during rehearsal time (just to make students conscious of the problem's existence and ways of dealing with it), it is better to note faults that you find during this period and to deal with them at another time."

This idea I believe is unique.

On page 84 is this outline of a rehearsal procedure:

> How Good Are Our Rehearsals?
>
> | | |
> |---|---|
> | Number of Measures in Festival Music | 1729 |
> | Daily quota | 91 |
> | Number of measures covered last rehearsal | 87 |
>
> If we are to finish on schedule we must cover 97 measures per day.

This appears in a chapter titled, "Festival Preparation a Yearlong Task." Number of measures per minute, the author seems to imply, is a test of a good rehearsal. I think this may indeed be an instance of over-simplification of "problem solving."

Possibly more important than the mechanics of operation, to the reviewer assessing the handbook, is the basic philosophy behind it. I do not believe it represents the best thinking of music educators. To illustrate:

"The football show is often criticized by people who are interested in the teaching of music purely for the sake of art promotion. Admittedly such performances take up a lot of time both for director and the students, but if the work is done well, they are worth the hours of rehearsal time that are forfeited and the headaches that they cause the directors."

"Trips that will be of value educationally are worthwhile; a few events should be scheduled simply because they will be *fun* for your students."

"When selecting music, remember that every member of your audience should find at least one number on the program which suits his particular taste."

Is there anything in the curriculum that could not be justified with these criteria?

While suggesting that the book must be taken in the light in which it was written—i.e., a workable formula for *one* successful band director, a critical yet discerning reader must agree that the book has value. It is particularly valuable to the young director

because he doesn't already "know" all the right answers to band problems. He will find it worth while to try out many of these "practical" solutions to assess their value empirically.

GEORGE KYME

Tonality and Atonality in Sixteenth-Century Music. By Edward E. Lowinsky. Berkeley and Los Angeles: University of California Press, 1961; xiii, 99 pp.; $3.50.

Edward E. Lowinsky, generally speaking, is most interested in the development of harmony and polyphony in the Renaissance. His writings greatly elucidate the music of this period, particularly that of the first half of the sixteenth century. They serve to remind one of his devotion to detail, the extraordinary scope of his competence (above all his interest in cultural, sociological, political tie-overs into the history of music) and his *droiture d'esprit*, which leads him to weigh scrupulously the issues latent in his research projects.

In earlier publications, such as his book, *The Secret Chromatic Art in the Netherlands Motets*, and in his articles, "The Function of Conflicting Signatures in Early Polyphonic Music," "Matthaeus Greiter's *Fortuna*: An Experiment in Chromaticism and in Musical Iconography," and "Adrian Willaert's Chromatic 'Duo' Re-examined" we have highly rewarding studies of the occurrence of chromaticism in the sixteenth century. In his latest book, *Tonality and Atonality in Sixteenth-Century Music*, the discussion is extended to "the development of tonal thinking in polyphonic art as a chronological evolution from Dunstable and Dufay, on the one hand, and *frottola* and *villancico* on the other, to Josquin, the French chanson, the Italian canzonet and *balletto*, and finally the English madrigal and lute air."

Lowinsky's fascinating study is an elaboration of "Awareness of Tonality in the Sixteenth Century," a paper written by him for the Congress of the International Musicological Society scheduled to meet in New York in the fall of 1961. In his *Secret Chromatic Art*, written in 1946, Lowinsky said that he was not writing solely for the historian of music but for the composer as well. Igor Stravinsky pays tribute to this imaginative consideration and respect of Lowinsky's for the composer by writing the foreword to the present book. Stravinsky's concluding words form a great tribute to what musicology can mean to the performer, composer, and historian, while at the same time helping considerably, one hopes, the promotion of this particular publication: "The subject matter of Professor Lowinsky's study is for me perhaps the most exciting in the history of music—he refers specifically to the development of tonality allied with the development of dance music—his method is the only kind of 'writing about music' that I value."

The method indicated by Stravinsky is that of modal and tonal analysis in chapters such as "The Theorist's View," "Floating Tonality and Atonality in Sixteenth Century Music," "Consolidation of Tonality in Balletto and Lute Ayre," "Tonality in Dance Music," and "Tonality and Statistics." Most of the conclusions drawn from analytical observations are supported by a copious amount of complete musical examples.

Since Lowinsky's book is designed to discuss tonal thinking in polyphonic music only, it is perhaps out of place to mention the lack of much effort to consider the growth of tonal feeling in monophonic music of the same period, such as some of the early Lutheran chorales conceived in the Ionian mode. But this may be another story. The information in Lowinsky's study is authoritative. It will be most welcome to musicians of many different sorts.

JOHANNES RIEDEL

A Guide to Effective Music Supervision. By Rudolph H. Weyland. Dubuque, Iowa: Wm. C. Brown Company, 1960; xv, 339 pp.; $6.50.

The present demand for evaluation of all parts of the educational program in our schools focuses attention on all publications

dealing with the subject of supervision and administration. In these days, those responsible for music instruction must analyze and evaluate their music supervisory systems.

Rudolph H. Weyland has written a comprehensive treatment of music supervision in the schools. He has organized his writing into four large sections dealing with "The Big Job of Music Supervision," "The Music Supervisor and His Job," "The Music Supervisor's Big Responsibilities," and finally a section devoted to the subject of "The Music Supervisor as a Leader." Each of these sections is made up of chapters in which the author attempts to apply certain principles of good supervision to typically recurring situations in music education. The book includes a well developed bibliography and index.

The writing of this author reflects the results of practical experience in the schools as well as extensive study of the subject of supervision. In the opinion of this reviewer, however, the book covers too broad an area and introduces far more detail than is necessary. Heavy editing of the manuscript would have done much to bring the book down to manageable size and avoid a great deal of repetition. The design and format of the book could have been shaped more effectively to produce a clearer presentation of the subject.

This book will be useful to supervisors, teachers, and students of supervision and administration. They will be interested in the many practical ideas presented, the helpful charts, illustrations and diagrams to be found throughout.

WILLIAM R. SUR

The Art of Music. By Beekman C. Cannon, Alvin H. Johnson, and William G. Waite. New York: Thomas Y. Crowell, 1960; 484 pp.; $8.50.

The predominant idea of *The Art of Music* is to give "styles greater meaning by relating them always to important philosophical and aesthetic ideas in their respective ages." To a large extent this appealing text accomplishes its difficult task, being well-written and containing, as it does, many excellent musical examples.

The sections on music before 1750 are provocative to the general student and form a valuable stimulus for those who are interested in having a broader orientation to music as related to history, aesthetics, the growth and development of the arts, and the sociological implications of life. There is, among others, an excellent chapter on music in the Middle Ages, to take a good example.

There is some question in my mind, however, about the advisability of devoting 287 of 465 pages to the events of 800 to 1750, leaving less than half the book for events occurring after that date. Is the earlier really greater than the later, or does it take more space to explain it?

In a book of this size one cannot expect everything. The treatment of the 20th century is necessarily brief. The essential adjuncts of listening, additional reading, "help" sessions for specific orientations, and analysis are covered.

The chief values of the book seem to be these: it offers an overview useful to the general reader, it provides a new perspective to the music student who is reviewing, and in the first half, especially, provides a stimulating orientation to music in its relations to the society of man.

WARNER IMIG

The World of Carnegie Hall: A Rich and Resonant History of One of America's Best Known Landmarks. By Richard Schickel. New York: Julian Messner, Inc., 1960; 438 pp.; $6.95.

As suggested by the title, the book relates a detailed account of the events of over seventy years in "the most important concert hall in America." The author portrays Carnegie Hall as a symbol of the intellectual and artistic elements in the country from 1880 to the present. Starting with the necessity of erecting an image of culture in a city famous for its business and financial establishments but barren of artistic life, Carnegie Hall represented that part of the nation changed from a small, closed society, which felt itself to be

the stewards of wealth, to the "milling mob of people who were intent on having cultural parity."

An intimate picture of every important musician of the world who visited Carnegie Hall is painted by Mr. Schickel. Although there is no documentation, he seems to rely heavily on newspaper reviews written about the concerts. From Theodore Thomas and Leopold Damrosch to Leonard Bernstein, the same problem existed: that of the conflict of lagging public taste with the idealism of the contemporary artist. The account of the conflict of Mahler with the orchestra's board and its tragic ending, and the dismissal of Toscanini by the National Broadcasting Company tell of this recurring problem.

Each musician attempted to solve the riddle of his relations with the public in his own way. It was often through the attempts at education, practiced notably by conductors Walter Damrosch and Leonard Bernstein, that improvement of taste was assayed. However, nothing could equal the drawing power of the brilliant performer to fill the hall to capacity. Toscanini's approach, which was precisely right for the then American musical mood, is perhaps the best example of this sort.

The programs given in Carnegie Hall, a building built by wealthy Andrew Carnegie, but strangely retained as a business venture, reflected the musical taste of the public in box office sales. With the recent purchase of the hall by the city of New York, as a monument to culture, one wonders in what direction public taste will now move.

HARTLEY D. SNYDER

Introduction to Music Appreciation: An Objective Approach to Listening. By William Hugh Miller. Philadelphia and New York: Chilton Co., 1961; xviii, 329 pp.; $6.00.

Hugh Miller's new text in *Music Appreciation* is intended for the college classroom, but could also be used in some high schools. Teachers at either level will be interested by his somewhat new approach to the organization of his subject. It consists of ten "units" (with "prologue" and five appendices), each, after Unit I, building on what has gone before.

Among these are especially well worked-out sections on New Tonal Concepts, Tone Color, Juxtaposition of Musical Elements and Form. The style of writing, and indeed the air of presentation here and elsewhere are at once economical, terse, definite, and businsslike. Sometimes, one is reminded of that useful little book, *An Outline History of Music,* by Hugh Milton Miller (New York: Barnes and Noble, Inc., 1947), who, as far as is known, is no kin of the present author. *Introduction to Music Appreciation* is so brief as almost to be an outline in some places.

If one wishes to take up the study of music *chronologically,* he probably could not use this book as a text, however useful it might be to him for certain background information. The section on aesthetic principles appears to be weak and rather too elliptical, with reliance on too few of the important writers in this field. The appendices are rich, however, and there are many specific, illustrative, and apt references, especially to appropriate recorded music.

PAUL S. IVORY

College Music Symposium: Journal of the College Music Society, Vol. I. Edited by Donald M. McCorkle. Kingsport, Tenn.: Kingsport Press, Inc., 1961; 113 pp.; $2.00 by subscription.

The College Music Society's new journal may be what the editor describes as "yet another journal of music" at whose arrival one can wince, but its purposes are not duplicated in other journals. For ". . . there is need for a provocative journal to cut across lines of specialization, to be a forum . . . [for the teacher] in the liberal arts college or the professional music school, . . . [be he] musicologist or composer, theorist or conductor, pianist or singer, music educator or administrator."

There are two symposiums in the first edition, on "The Lag of Theory Behind Practice," and on "A Re-examination of Teacher Training in Music." The method in the latter is to present a paper by Alexander L. Ring-

er, to which a first response is given by Theodore F. Normann, a second response by Douglas Kidd, a third by Harold C. Youngberg, and, finally, a rejoinder by Ringer. Attack, defense, rebuttal.

It works all right seemingly, but a principal result of this symposium seems to be the realization that music education varies in quality across the country so much that the writers never seem to be talking about the same thing, since they know only what goes on in their own particular regions. Can anyone say what the level, or average, or range of teacher training competence really is?

The publication is a handsome one and is handsomely printed. Parts of the journal are called "Prelude" and "Coda"; a quarter-note signifies the end of some of the sections, and there are G clefs and other musical signs sprinkled about in other places. A little bit whimsical and cute for college professors?

PAUL S. IVORY

TYPING AN ARTICLE

SUGGESTIONS for preparing articles for the *Journal of Research in Music Education* are given briefly on the masthead page. These additional cautions may be helpful to those who plan to submit articles for editorial consideration:

1. Do not single space any material whatsoever, including itemized lists, long quotations, and text for footnotes.

2. Do not place your footnotes at the bottom of pages. Even though they will eventually appear there, you should type them separately, placing them in numerical order at the end of the article, beginning on a separate page, using triple spaces between the notes.

3. Put all tables, figures, graphs and other illustrations on separate pages. Using arabic numerals, designate the order of tables and figures. A marginal notation indicating the approximate location desired for each illustration can be helpful.

4. Do not try to save a few pages of paper by using narrow margins. Editors need the margins for a variety of notes to the printer.

5. Be sure to check the accuracy of all quotations, page references, names, and other factual materials.

Criteria for the Selection of Articles

THE CRITERIA used in selecting articles for publication in the *Journal of Research in Music Education* can be simply stated. Aside from simple and necessary requirements having to do with expression, logic, documentation, and other mechanics of writing, all articles submitted are evaluated in the light of three considerations. Framed as questions, these considerations are as follows:

1. *Is the article based upon serious and extended study of some aspect of music education?* In this question, the term research is defined by implication; that is, its reference is not limited to historical study, nor to scientific study, nor to the study of present-status, but embraces all of these as well as any other form of study, so long as the work has been rigorously prosecuted and effectively reported. Furthermore, the term music education is to be taken in its widest sense. Music education involves, in addition to the teaching of music in elementary and secondary schools, the training of the teachers themselves. A sizable body of music educators consists of those who teach music in colleges to prospective and in-service teachers. Bachelor's, master's, and doctoral degree programs now offered in music education must be planned and directed by music educators. The range of interest of students and teachers in these programs is very wide and while the editorial staff must use a certain discrimination as regards subject matter in selecting articles for publication, neither can the staff restrict too narrowly the scope of subject matter presumably, potentially, or properly of interest to music educators. In the light of these considerations, the editorial staff has devised a rule of thumb whereby the term music education is considered to relate to music teaching of any kind as well as to other musical activities, such as directing community orchestras, bands, and choirs, in which the aims of the endeavors may be described as cultural rather than professional.

2. *Is the author of the article a member of the music education profession?* Let it be said immediately that the editorial staff welcomes contributions from those outside the profession providing the contributions deal with instruction in music. On the other hand, the staff feels obligated to give the most serious consideration to any research report, regardless of its subject, which is submitted by a member of the profession. The logic of this consists simply in the fact that what one music educator considers worthy of investigation is on that very account of possible interest to other music educators. Here again, there is no wish to delimit arbitrarily the presumed interests of our profession.

3. *Is the article based on an academic thesis or dissertation in music education?* It need not be, of course, but one of the principal aims of the MENC in establishing the *Journal of Research in Music Education* was to provide a vehicle for the publication of the best research produced by the many advanced students in various colleges and universities throughout the country. Therefore, the editorial staff gives special consideration to such articles, feeling that to publish as many as possible will serve many worthy purposes, not the least of which are to obviate much duplication of effort and to aid in the establishment of qualitative standards in research by holding up the best to public scrutiny. *A.P.B.*